Pirate Math Equation Quest

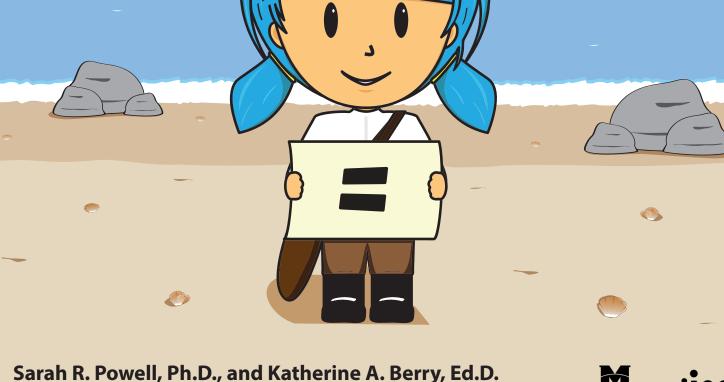


Individual Word-Problem Intervention With Total, Difference, and Change Schemas



Student

Materials



The University of Texas at Austin



Pirate Math Equation Quest

Individual Word-Problem Intervention with Total, Difference, and Change Schemas

STUDENT MATERIALS

Sarah R. Powell & Katherine A. Berry

This research was supported in part by Grant R324A150078 from the Institute of Education Sciences in the U.S. Department of Education to the University of Texas at Austin. Content is solely the responsibility of the authors and does not necessarily represent the official views of the U.S. Department of Education. For more information, please contact:

Sarah R. Powell, Ph.D. srpowell@austin.utexas.edu

Katherine A. Berry, Ed.D. kberry@austin.utexas.edu



Thank you to the third-grade teachers and students of Austin Independent School District who graciously participated in this research project. We also thank the many research assistants at the University of Texas at Austin for their time, effort, and dedication to the project. A special thanks to Ana Acunto for her assistance in the development of this manual.

Table of Contents

Introduction

Introduction	5
In This Manual	
Student Materials	
Supplemental Materials	
Other Materials	

Student Lesson Packets

Lesson 1	
Lesson 2	
Lesson 3	
Lesson 4	
Lesson 5	
Lesson 6	
Lesson 7	
Lesson 8	
Lesson 9	
Lesson 10	
Lesson 11	61
Lesson 12	65
Lesson 13	
Lesson 14	
Lesson 15	77
Lesson 16	
Lesson 17	
Lesson 18	
Lesson 19	
Lesson 20	
Lesson 21	
Lesson 22	
Lesson 23	
Lesson 24	
Lesson 25	
Lesson 26	
Lesson 27	
Lesson 28	
Lesson 29	
Lesson 30	
Lesson 31	141
Lesson 32	
Lesson 33	
Lesson 34	
Lesson 35	
Lesson 36	
Lesson 37	
Lesson 38	

Lesson 39	
Lesson 40	
Lesson 41	
Lesson 42	
Lesson 43	
Lesson 44	
Lesson 45	
Lesson 46	
Lesson 47	
Lesson 48	
Lesson 49	
Lesson 50	
Lesson 51	221



Welcome to Pirate Math Equation Quest!

We designed this version of *Pirate Math Equation Quest* as an individual intervention for use with students at the third-grade instructional level. This version of the program was developed to offer support to Tier-2 and Tier-3 students who require supplemental mathematics remediation in the area of word-problem solving. The focus of the *Pirate Math Equation Quest* individual intervention is single-digit and double-digit additive word problems that include three schemas: Total, Difference, and Change.

This manual includes the Student Lesson Packets and accompanying Supplemental Materials (i.e., posters, maps, cards, graphs, and mats) necessary to implement *Pirate Math Equation Quest* with individual students. A separate Teacher Manual includes the teacher materials, including the Teacher Lesson Guides and Teacher Activity Guides, needed to implement *Pirate Math Equation Quest*.

Scientific evaluations of *Pirate Math Equation Quest* indicated that at-risk third-grade students (with and without mathematics disabilities) who performed in the lowest 13th percentile of their classes demonstrated improved word-problem performance with *Pirate Math Equation Quest* compared to students who did not participate in *Pirate Math Equation Quest* (Powell, Berry, & Barnes, 2019).



This Student Manual includes the following:

Introduction

- Basic information about implementing Pirate Math Equation Quest
- Explanation of Student Materials
- Explanation of Supplemental Materials
- Explanation of Other Materials

Student Lesson Packets 1-51

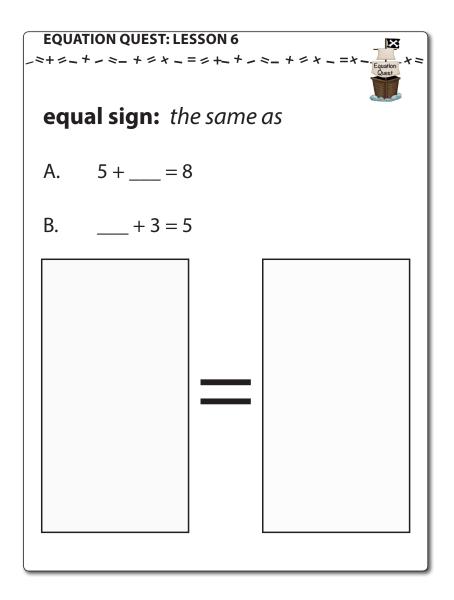
• Student Lesson Packets include all of the materials the student will need for each lesson. Each Lesson Packet includes 4 pages (1) Equation Quest worksheet (begins in Lesson 3; page 1), (2) Buccaneer Problem worksheet (pages 2-3), and (3) Jolly Roger Review worksheet (page 4).



The Student Materials needed for each lesson are organized in a packet by lesson. For example, the Student Lesson Packet for Lesson 6 is labeled Lesson 6 Student Lesson Packet.

- Student Lesson Packets include the following 4 pages:
- (1) Equation Quest (beginning in Lesson 3; page 1)
- (2) Buccaneer Problems (pages 2-3)
- (3) Jolly Roger Review (page 4)

Pictured below is the Equation Quest worksheet, page 1, in the Lesson 6 Student Lessson Packet.



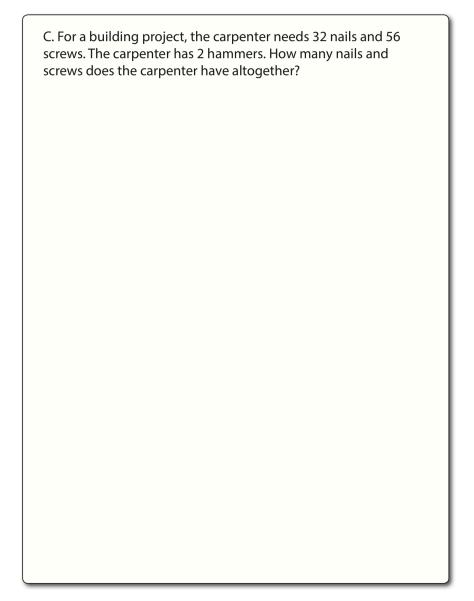
All Student Lesson Packets include 4 pages, so the packets can be printed for students in a set prior to the lesson. Teachers should print the Student Lesson Packets double-sided with a staple in the top left-hand corner. *Note that page 1 of the Student Lesson Packets for Lessons 1 and 2 is blank because Equation Quest is introduced during Lesson 3*. The Student Lesson Packets for all 51 lessons are included in this manual.

After Equation Quest, students complete three Buccaneer Problems. Buccaneer Problems serve as a guided practice opportunity for students to solve word problems. Teachers provide support and feedback as needed.

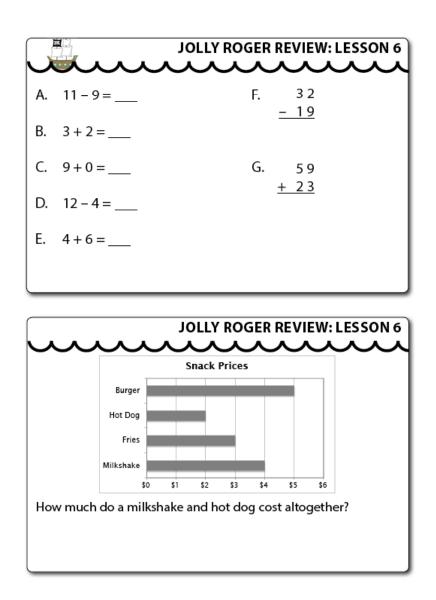
Page 2, the front side of the Buccaneer Problems worksheet in the Lesson 6 Student Lesson Packet, is displayed below.

BUCCANEER PROBLEMS: LESSON 6	•
A. Mrs. Taylor bought 4 apples and 9 bananas. How many apples and bananas did Mrs. Taylor buy?	
B. Alex found 3 shells and 8 rocks on the beach. He found 7 leaves in the woods. How many shells and rocks did Alex find on	
the beach?	

Page 3, the back side of the Buccaneer Problems worksheet in the Lesson 6 Student Lesson Packet, is displayed below. Buccaneer Problems include three word-problems: Problems A, B, and C.



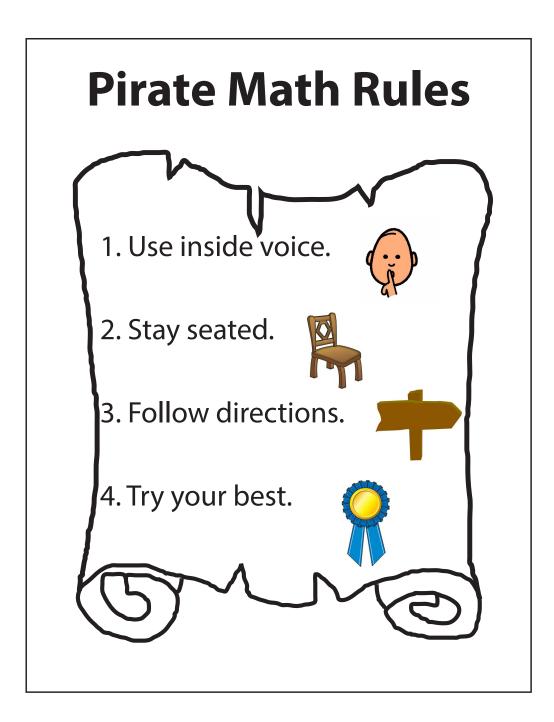
The final worksheet in the Student Lesson Packet is the Jolly Roger Review. The Jolly Roger Review is an independent practice activity that provides students the opportunity to demonstrate their understanding of learned concepts. Below is the Jolly Roger Review worksheet, page 4, in the Lesson 6 Student Lesson Packet.

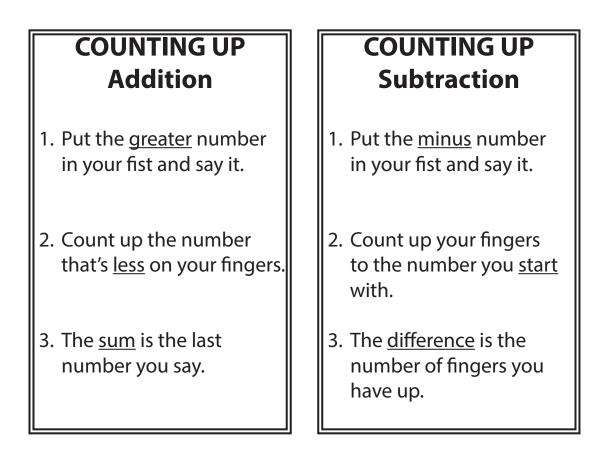


Teachers score the top of the Jolly Roger Review worksheet as the number of addition and subtraction problems answered correctly. Teachers score the bottom of the Jolly Roger Review worksheet out of 2 points. Students earn one point for the correct number answer; students earn one point for the correct label answer. As needed, teachers provide feedback and a brief review to students.

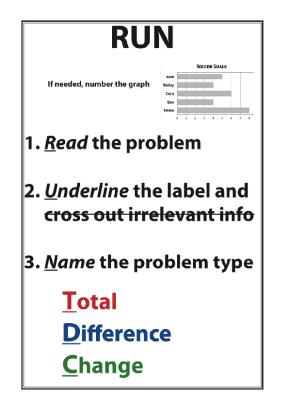


Pirate Math Equation Quest includes five posters for teachers to display throughout the lessons. Templates for the posters are included in this manual. In the beginning lessons, teachers should display the Pirate Math Rules and Counting Up Addition and Subtraction posters pictured on this page and the following page.

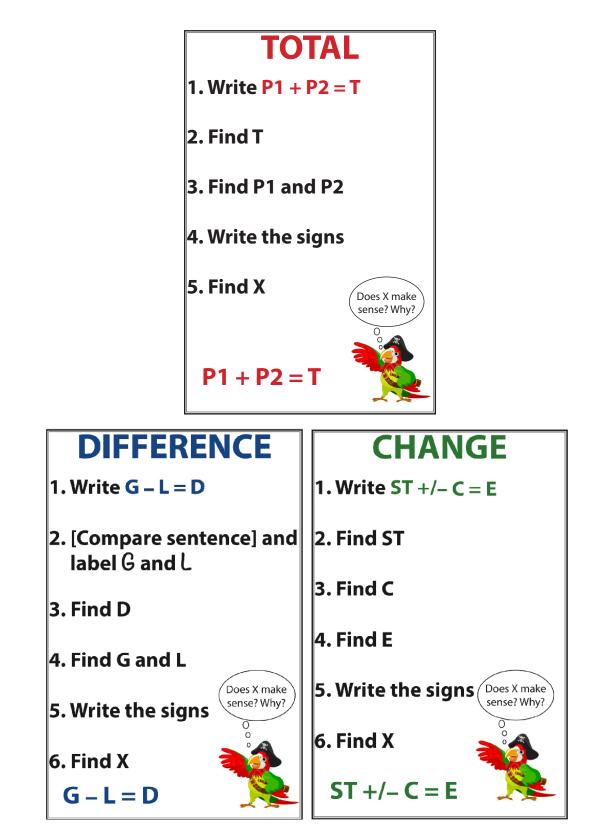




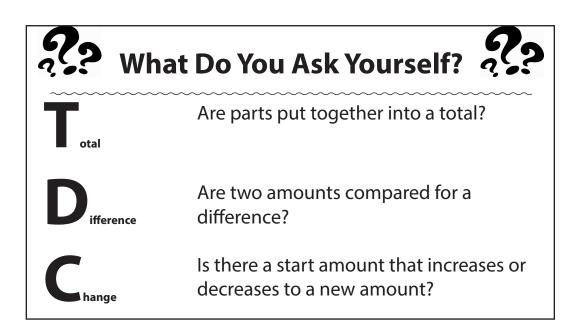
As teachers introduce the three schemas, Total, Difference, and Change, they need to display the RUN poster, pictured below, and the corresponding schema posters for students to reference. The RUN poster provides an attack strategy for students to use as they solve word problems.



The schema posters, pictured below, provide specific steps for setting up and solving a word problem after identifying the correct schema. Total problems are introduced during Lesson 5, Difference problems are introduced during Lesson 17, and Change problems are introduced during Lesson 34.



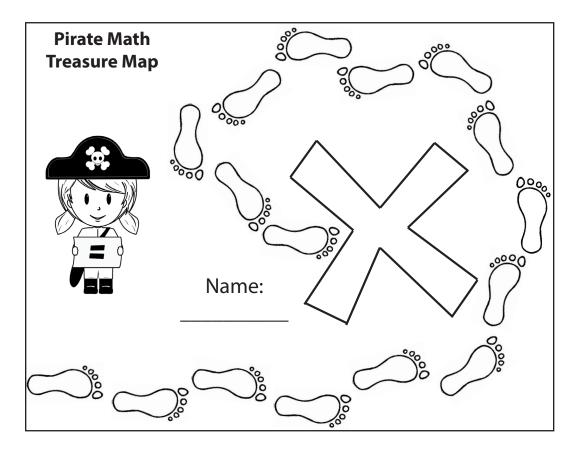
After teachers have introduced the Total, Difference, and Change problems, they should display the What Do You Ask Yourself? poster, featured below. The What Do You Ask Yourself? poster, introduced during Lesson 38, provides a prompt for students to ask questions and gesture to determine the correct schema. We encourage teachers to use gestures to help students recall the three schemas. The Total gesture is introduced in Lesson 5. The Difference gesture is introduced in Lesson 17. The Change gesture is introduced in Lesson 34. Teachers can refer to the Lesson Guides to learn the specific schema gestures to model for students. Students often struggle to identify the correct problem type after all three schemas have been introduced. This poster helps students to distinguish between the Total, Difference, and Change schemas.

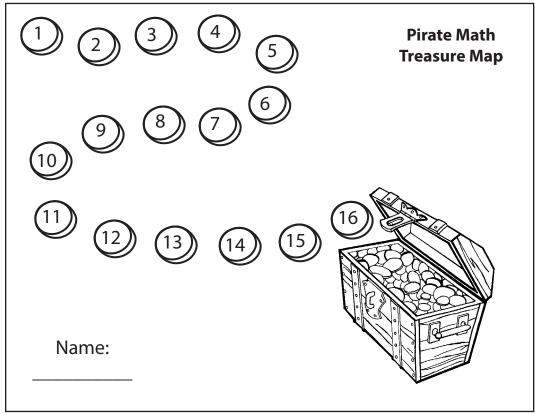


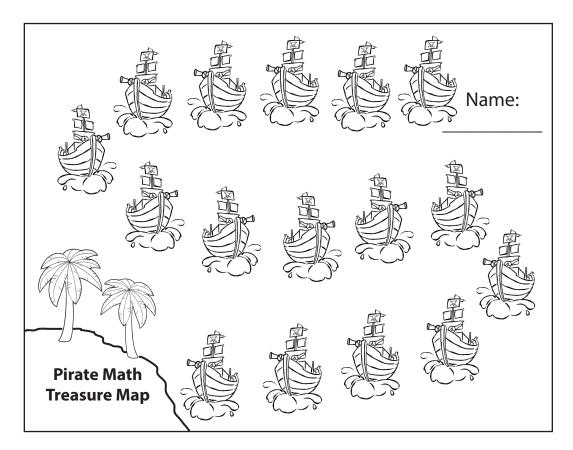
During every lesson, teachers also display the Treasure Map. Throughout each lesson, students can earn coins for their Treasure Map for following the Pirate Math rules. When students reach the end of their Treasure Map, they earn a novelty prize from a treasure box.

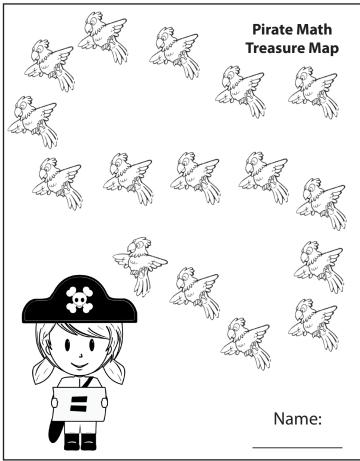
If teachers do not have coins, they can use stamps, stickers, or colored pencils to color the designated number of spaces on the Treasure Map. Similarly, teachers can use any prize bag or box if they do not have a treasure box.

On the following pages are four different variations of the Treasure Map. Teachers can choose one map or alternate maps depending on student preference. All four Treasure Map templates are included in this manual.



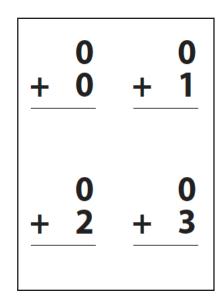






For the Math Fact Flashcards Activity, teachers need to cut and print the Math Fact Flashcards and print the Math Fact Flashcards graph. Templates for the Math Fact Flashcards and the Math Fact Flashcards graph are included in this manual.

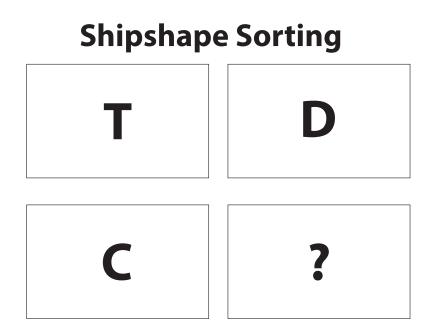
The Math Fact Flashcards include an addition or subtraction problem on the front side of the card and the correct answer on the back side of the card. It is recommended that teachers print these cards double-sided on cardstock. There are four problems per page; teachers should cut each page into fourths using a paper cutter.



Teachers also need to print the Math Fact Flashcard Graph, pictured above, in advance of the lesson. At the end of the Math Fact Flashcards activity, students graph their higher score from the two trials on the graph below. Teachers should plan to copy extra graphs for easy access after students complete the first graph.

	Math Fact Flash Card Graph															
40	1													1		40
39																39
38																38
37	-											_		-		37
36	-	-	-		_		-			_		_		-	-	36
35	-	-	-		-	-	-			-	-	-	-	-	-	35
34	+	-	<u> </u>		_	<u> </u>	<u> </u>	<u> </u>		-	-	_	-	-	<u> </u>	34 33
33	+	-	-		-		-	-		-		-		-		33
31	+	-	-		-	-	-	-	-	-	-	-		-		31
30	+	-	-	-	-	-	-		-	-	-	-		-		30
29	-		-		-		-			-		-		-		29
28	-	-	-		-		-			-		-		-		28
27	-															27
26																26
25																25
24																24
23																23
22												_		-		22
21	_		L									_		<u> </u>		21
20	-		<u> </u>		_		<u> </u>			_		_		-	L	20
19 18	+	-	-	-	-	-	-			-	-	-	-	-	-	19 18
18	-	-	-	-	-	-	-	-	_	-	-	-		-	-	17
16	+	-	-	-	-	-	-			-	-	-		-	-	16
15	+	-	-		-		-			-		-		-	-	15
14	+	-	-		-	-	-	-		-		-		-	-	14
13	+	-	-		-		-			-		-		-		13
12	-						-			-		_				12
11																11
10																10
9																9
8																8
7																7
6																6
5												_				5
4	_				_					_		_		_		4
3	-	-	-	-	-	-	-	<u> </u>	-	-	-	-	-	-	-	3
2	-	-	-	-	-	-	-	-		-	-	-	-	-	-	2
1 Day	+	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1

During Shipshape Sorting, which begins in Lesson 7, students participate in schema sorting practice using sorting cards and the sorting mat, displayed below. Templates for the Shipshape Sorting Mat and accompanying cards are included in this manual.



The Shipshape Sorting cards include a word problem on the front side of the card and the correct schema (i.e., T for Total, D for Difference, and C for Change) on the back side of the card. It is recommended that teachers print the Shipshape Sorting cards double-sided on cardstock. There are four word problems per page; teachers should cut each page into fourths using a paper cutter.

Jerry saw 3 sharks at the	Dante's mom planted 8 trees and
aquarium. He saw 2 turtles. How	rose bushes in the yard. She
many sharks and turtles did Jerry	planted 4 rose bushes. How many
see?	trees did she plant?
Ann and Elise sold 7 boxes of Girl	Mrs. Towns spent \$4 at the
Scout cookies. Elise sold 3 boxes.	grocery store and \$5 at the pet
How many boxes of cookies did	store. How much money did she
Ann sell?	spend in all?



Other Materials

The following materials are used throughout the program but are not included in this manual.

- Timer
- Cubes
- Gold coins
- Treasure box

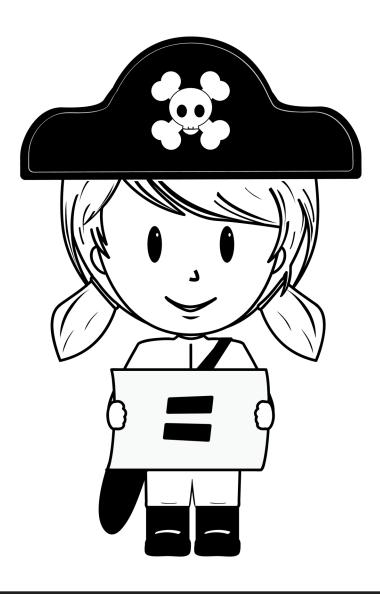
The timer is used during the timed activities: Math Fact Flashcards, Shipshape Sorting, and Jolly Roger Review.

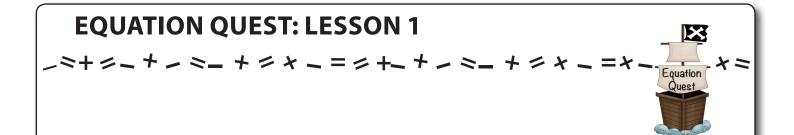
Different colored unit cubes are used during Equation Quest to help students develop their prealgebraic reasoning skills. The timer and cubes can be purchased from a teacher supply store or a mathematics manipulatives company.

The gold coins and treasure box are used throughout the lesson to reward students for following the Pirate Math rules. As previously mentioned, stamps, stickers, or colored pencils can substitute for gold coins. Teachers can use any prize bag or box if they do not have a treasure box.

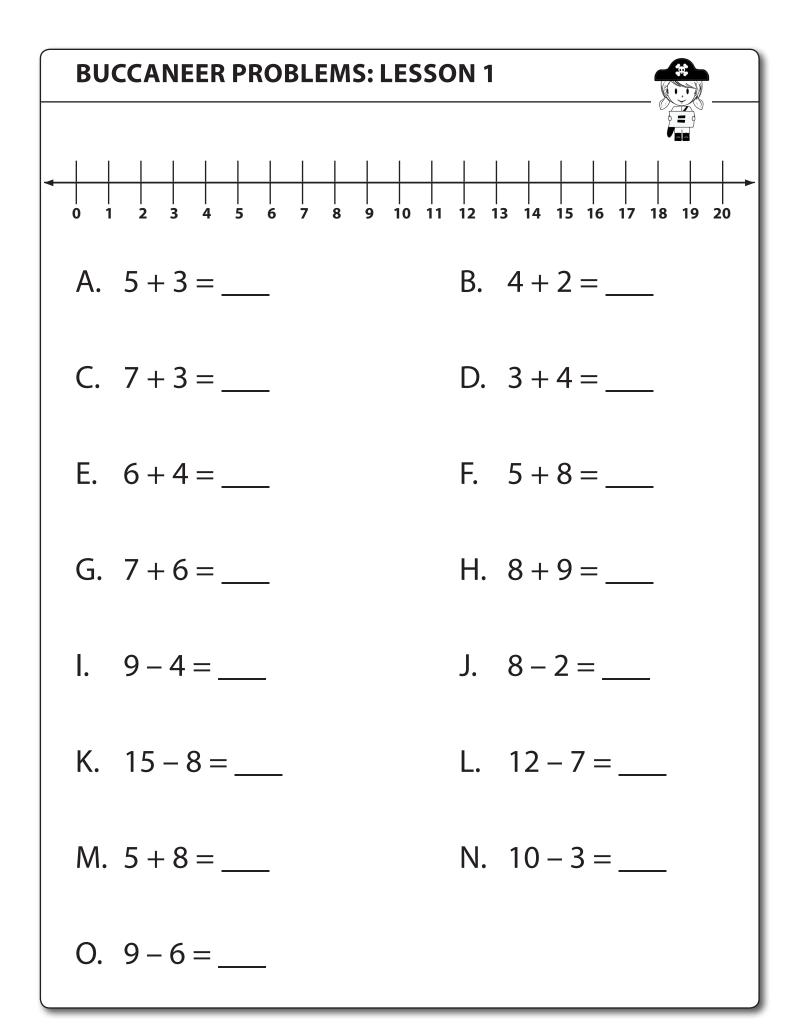
For all lessons, teachers and students also need pencils.

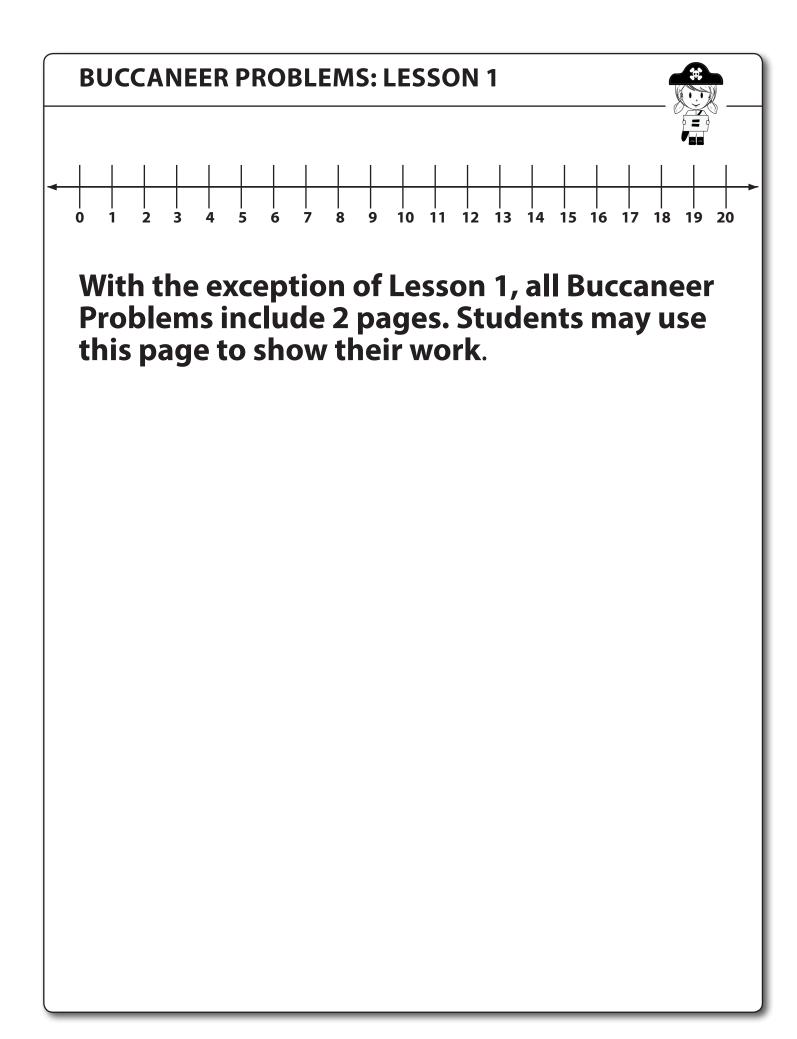
Student Lesson Packets

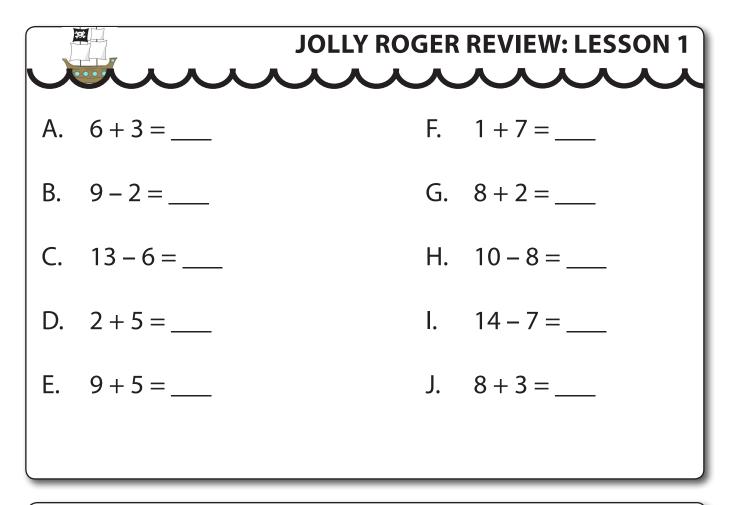




Equation Quest starts in Lesson 3.

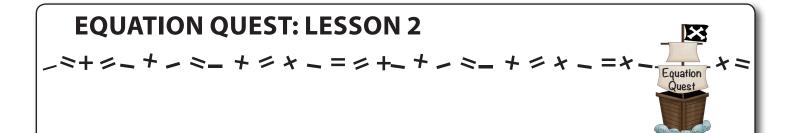






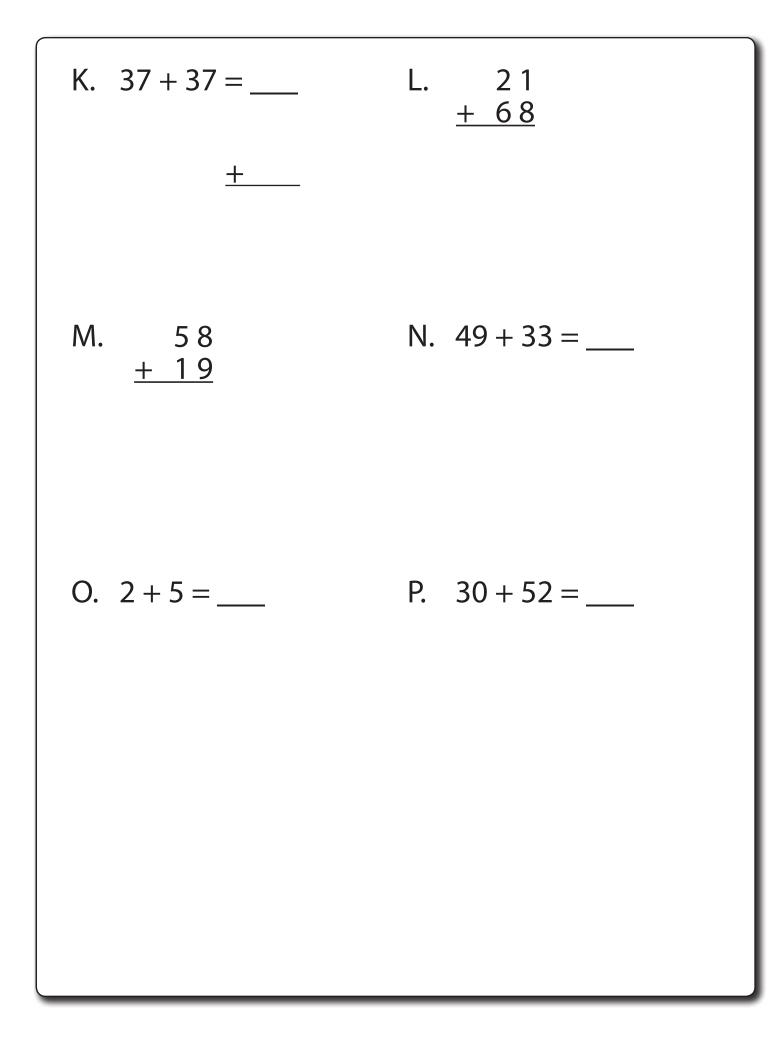


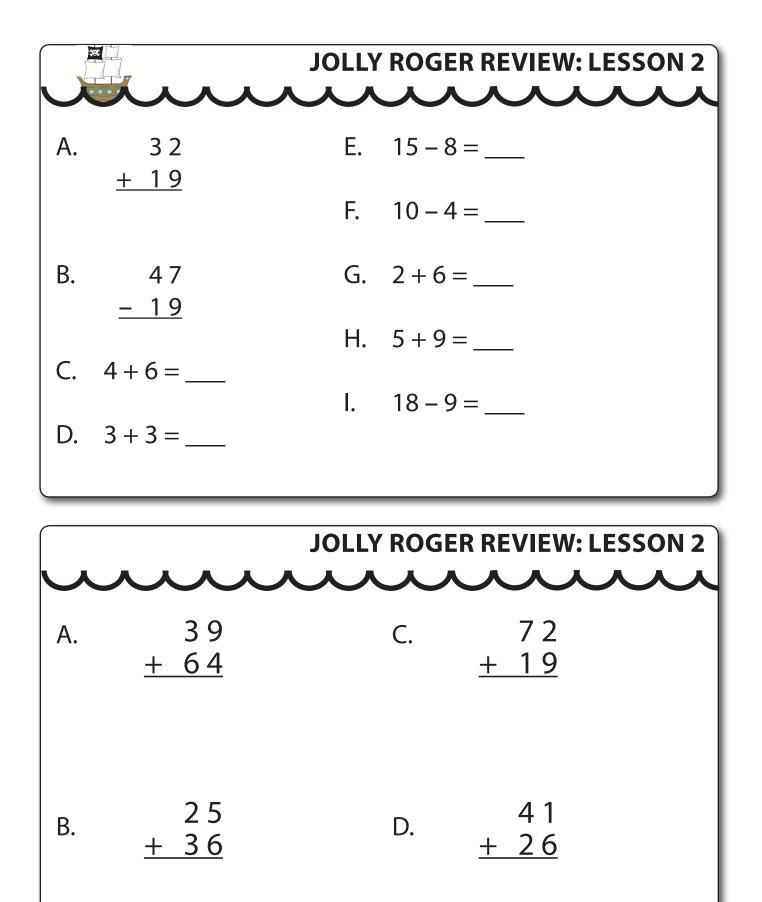
Tessa drew 2 pictures of cats. She drew 5 pictures of dogs. How many pictures did Tessa draw?

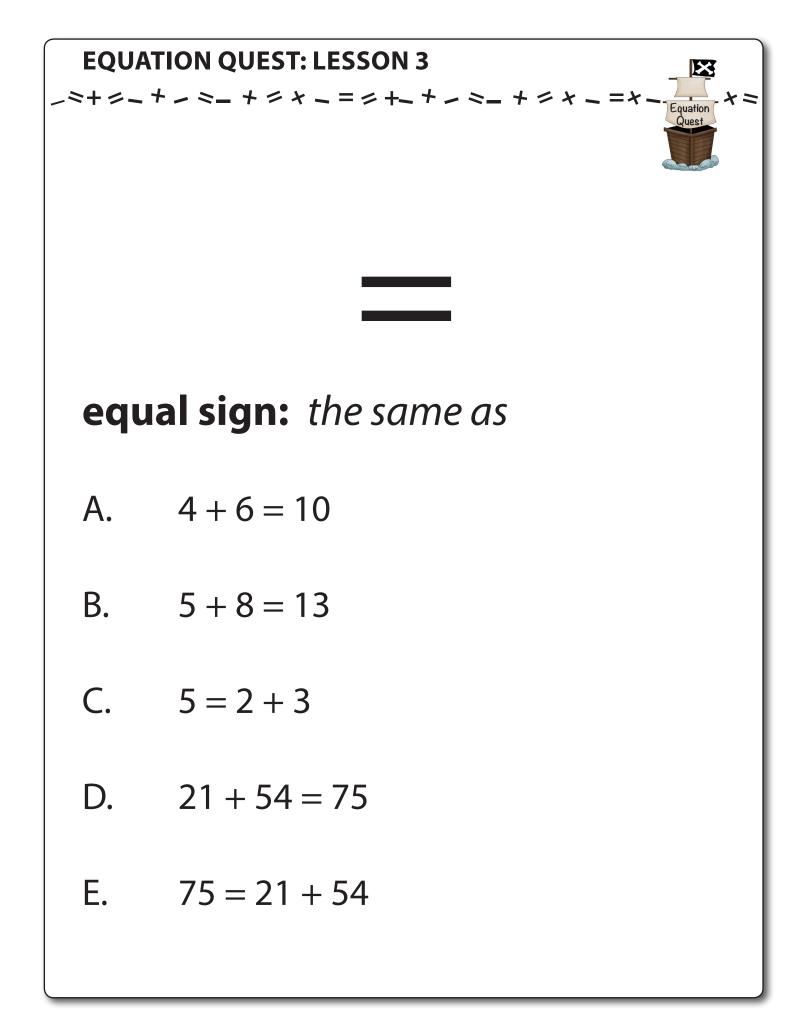


Equation Quest starts in Lesson 3.

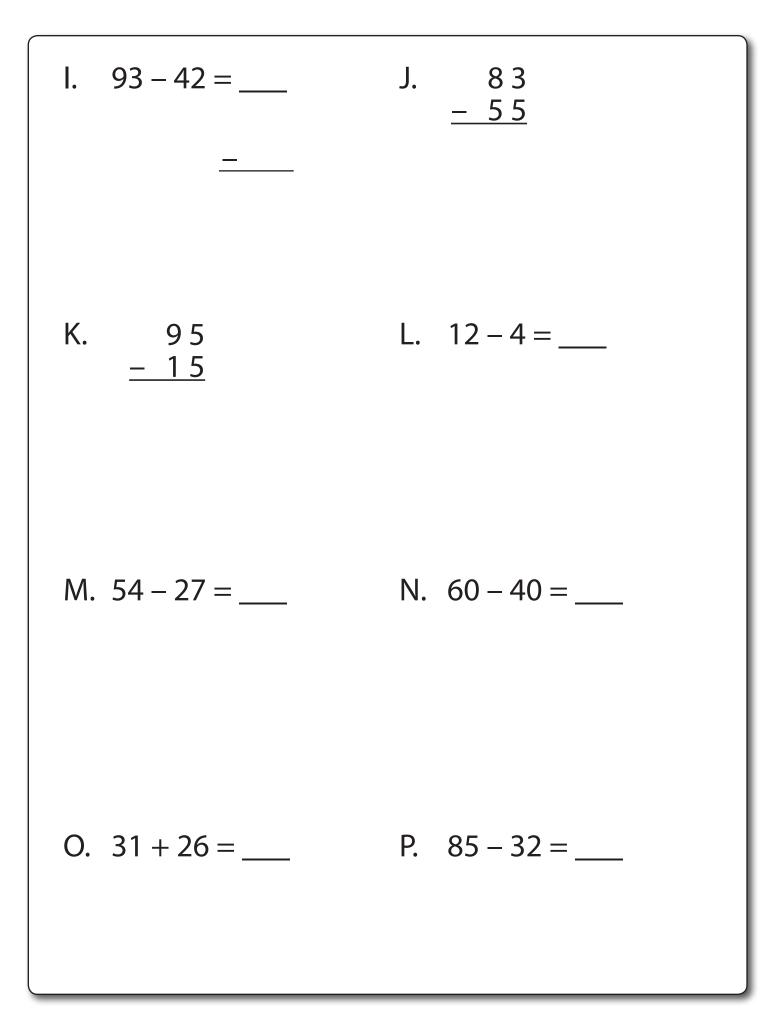
BUCCANEER PROBLEMS	5: LESSON 2
A. 6 + 3 =	B. 4 + 9 =
C. 7 – 3 =	D. 12 – 5 =
E. 41 + 23 =	F. 56 + 38 =
41 <u>+ 23</u>	56 <u>+ 38</u>
G. $27 + 42 = _$ 27 + 42	H. $30 + 45 = \3 0$ + 45
I. 65 + 19 =	J. 12 + 25 =
<u>+</u>	<u>+</u>

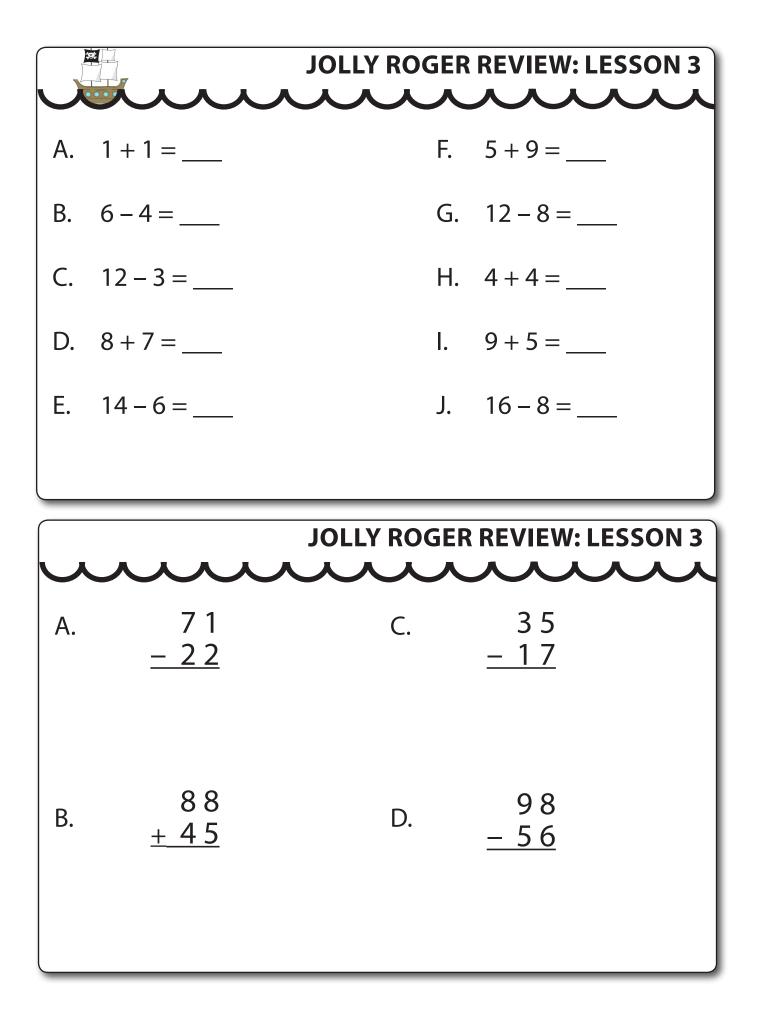


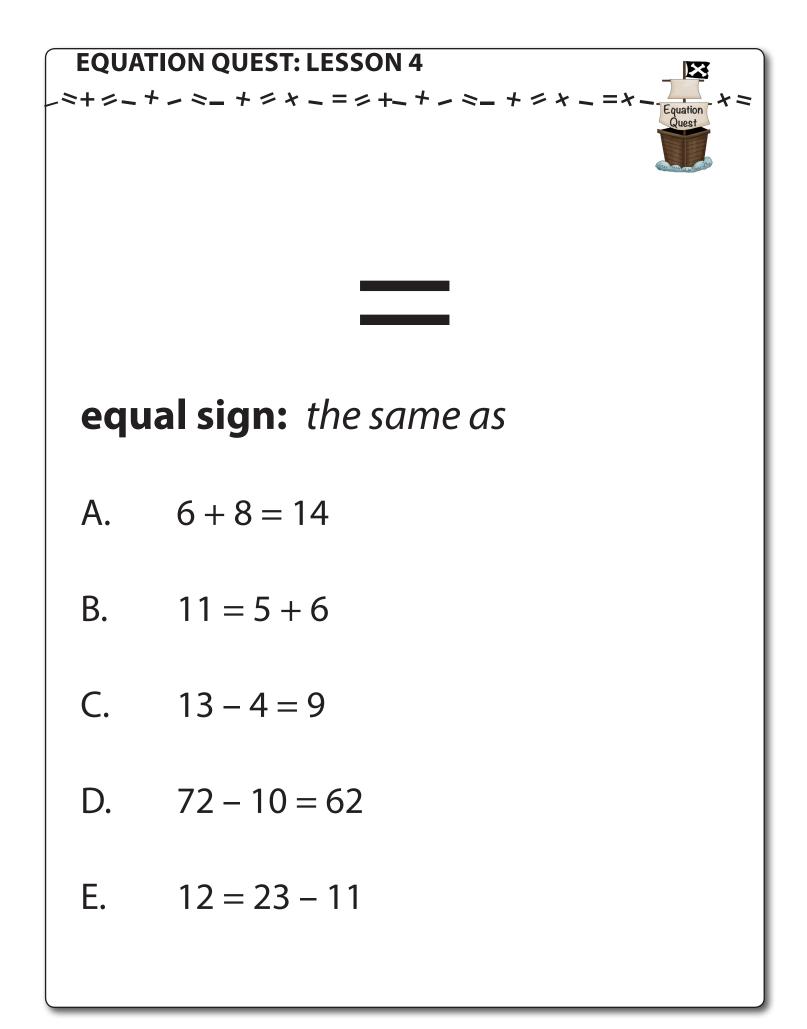


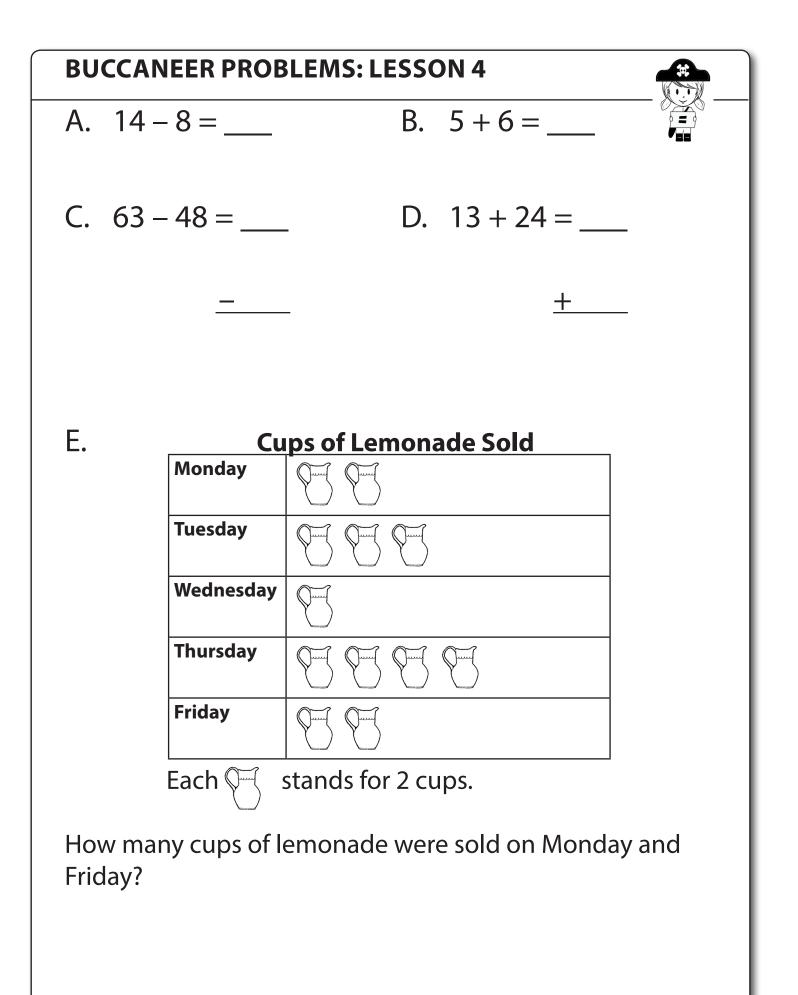


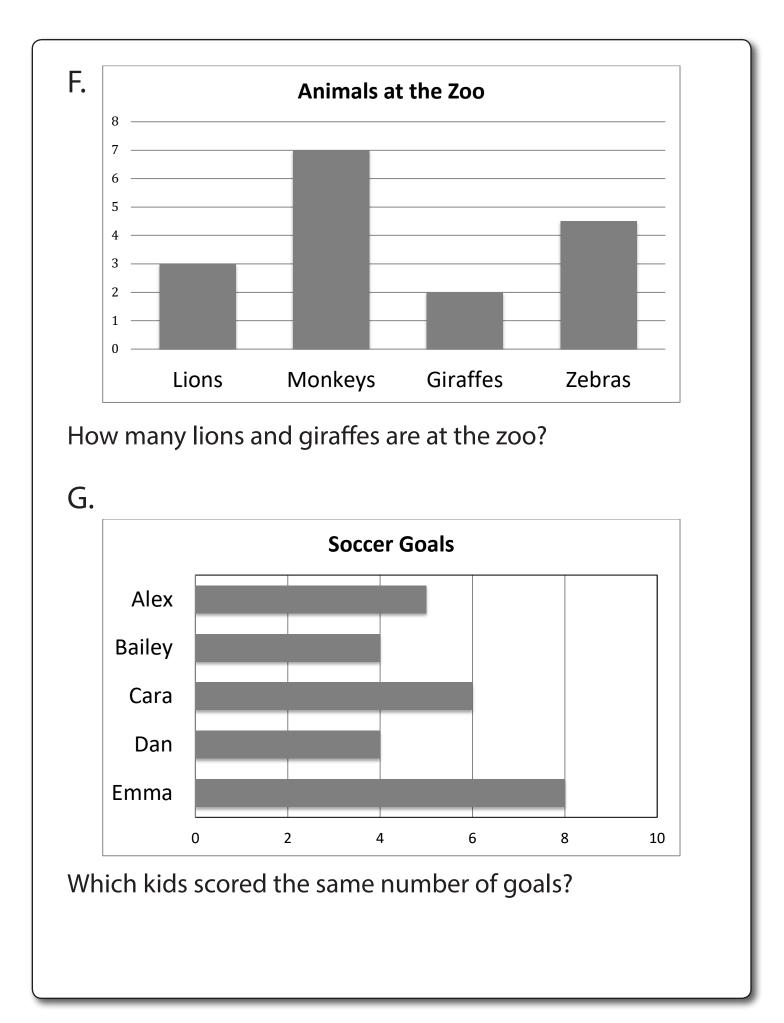
BUCCANEER PROBLEMS	S: LESSON 3
A. 2 + 8 =	B. 15 − 7 =
C. $36 + 22 = _$ 36 + 22	D. 49 + 14 = +
E. $35 - 23 = \$ 35 = 23	F. $62 - 48 = \{62}$ - 48
G. 47 – 25 =	H. 77 – 12 =

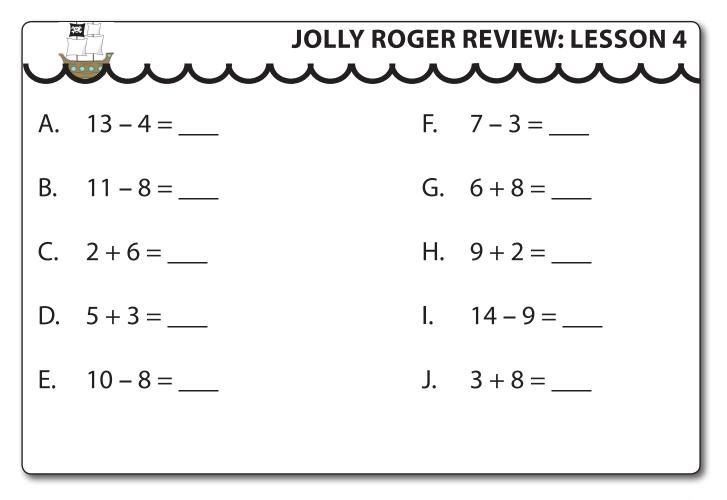


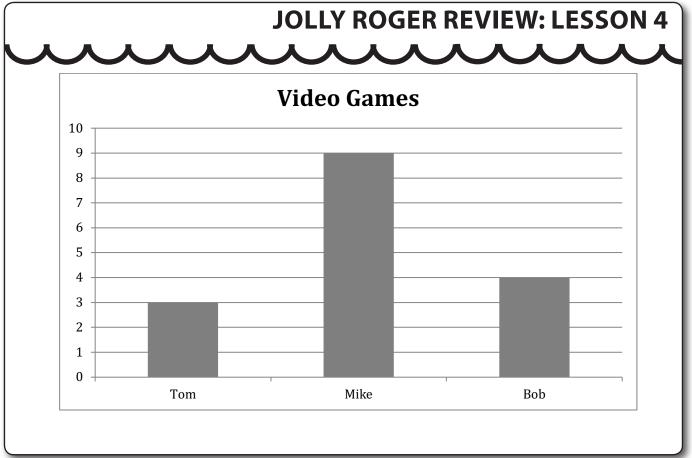


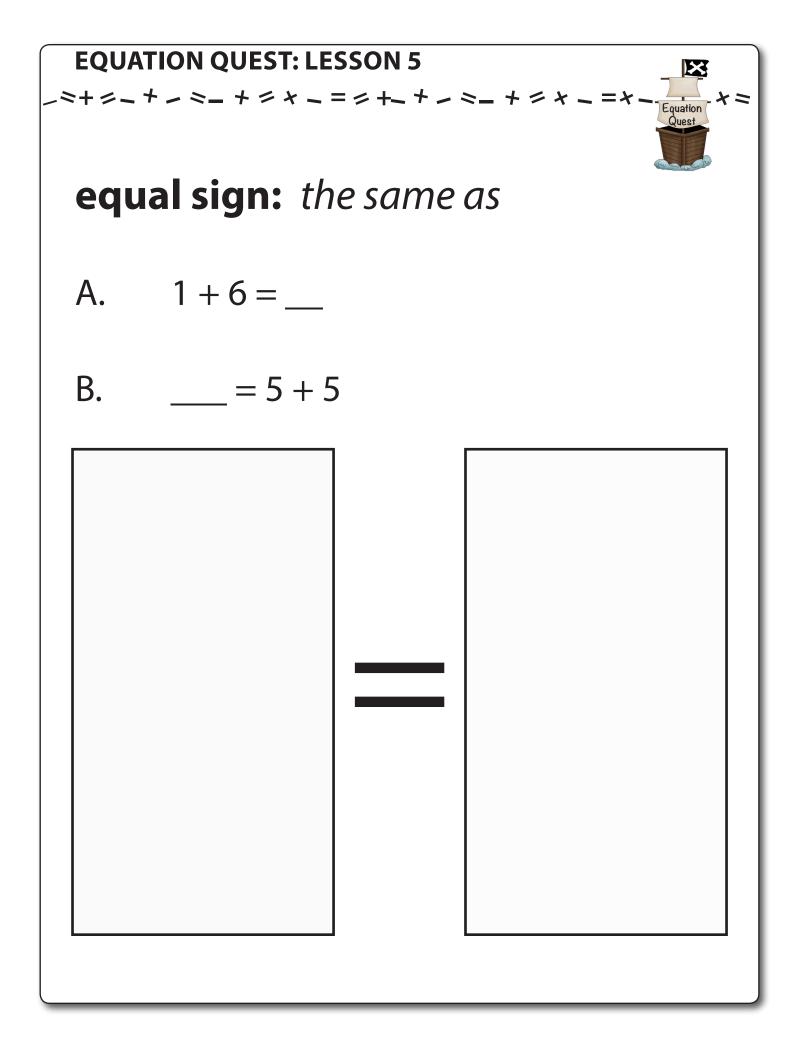












A. Diana has 2 crayons. Stacy has 5 crayons. The girls have 7 crayons in all.

2 + 5 = 7

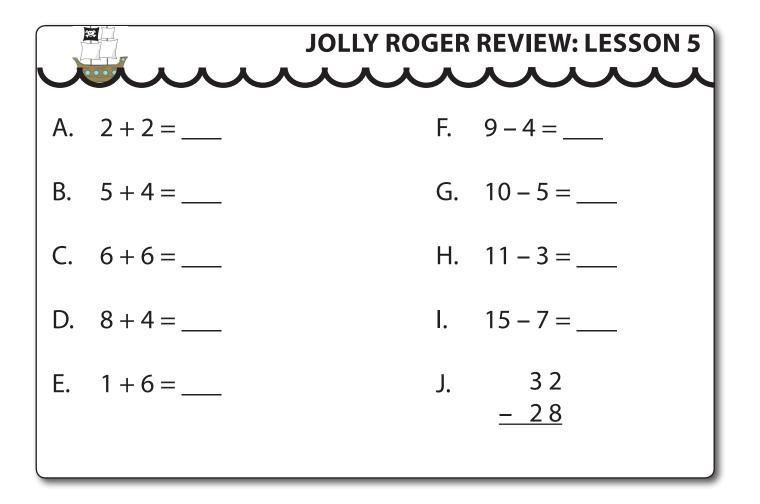


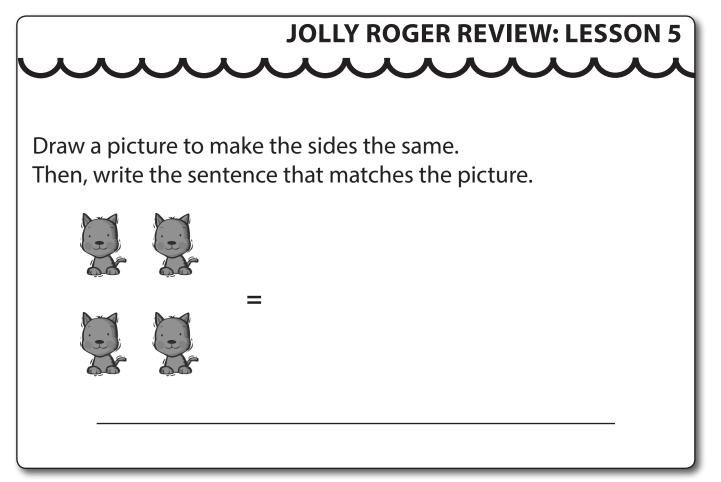


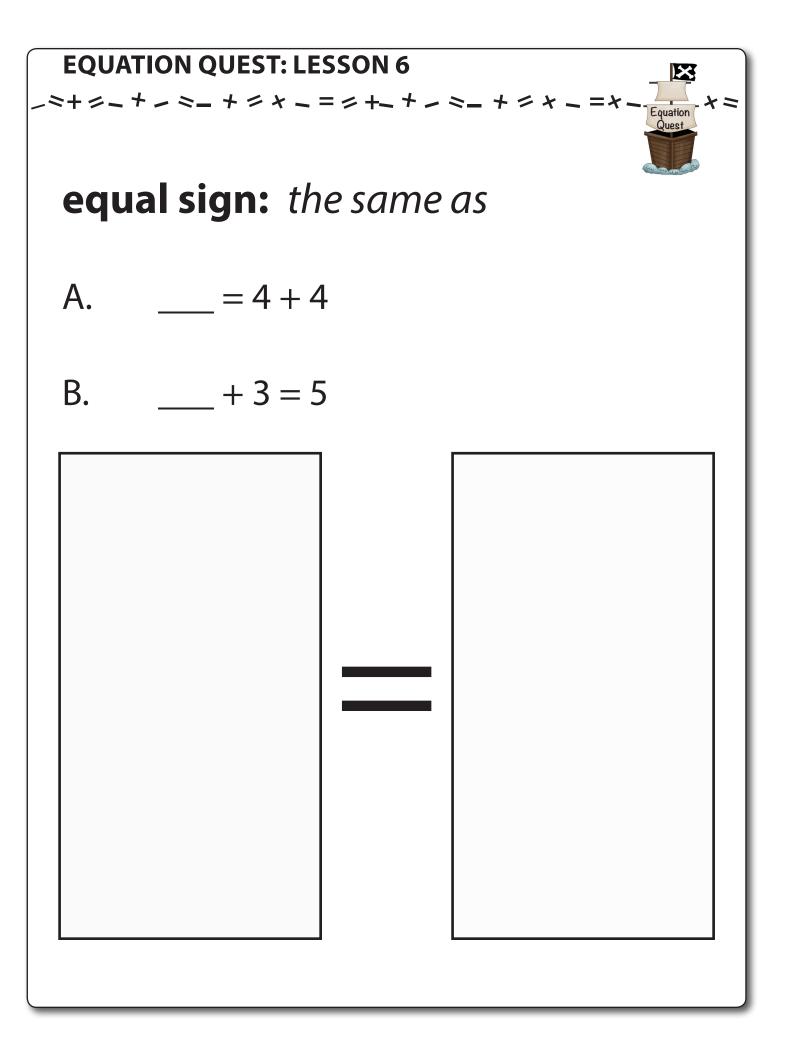
Diana

Stacy

B. Diana has 2 crayons. Stacy has 5 crayons. How many crayons do the girls have together?



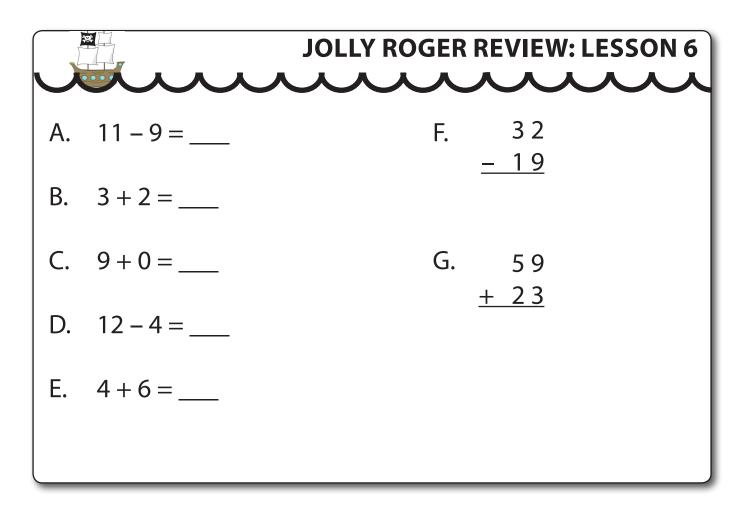


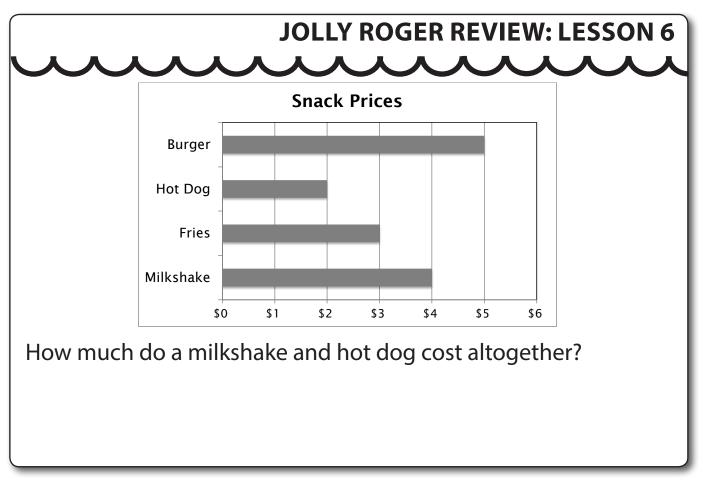


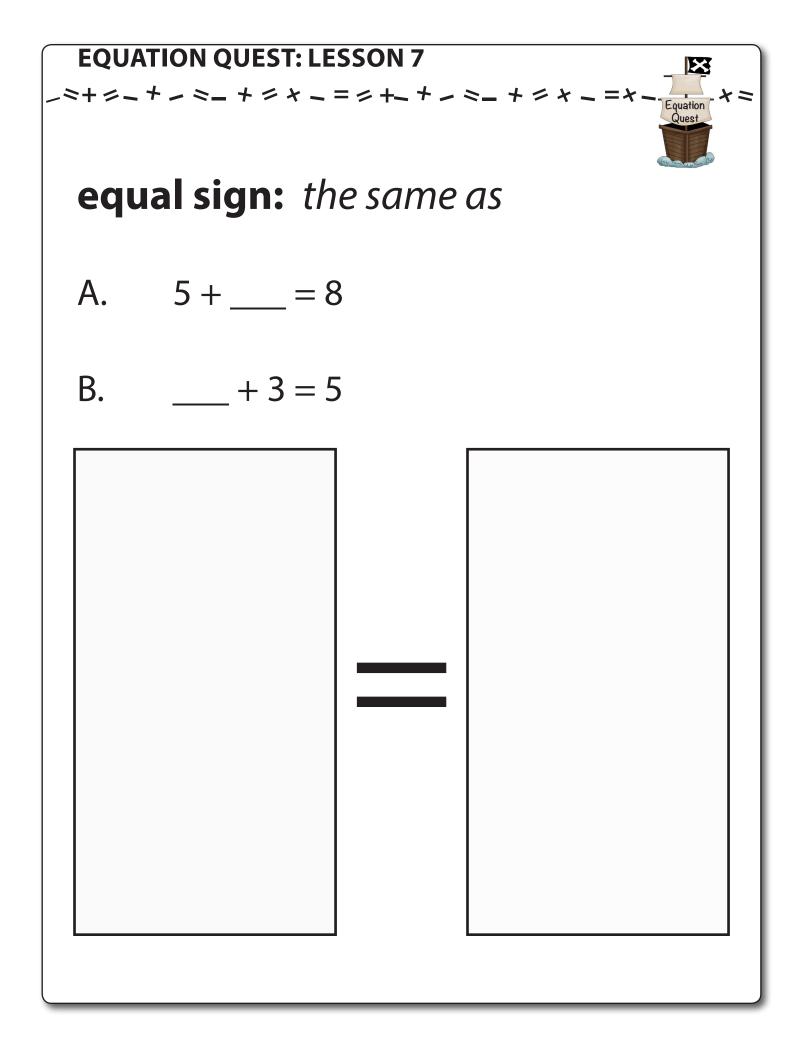
A. Mrs. Taylor bought 4 apples and 9 bananas. How many apples and bananas did Mrs. Taylor buy?

B. Alex found 3 shells and 8 rocks on the beach. He found 7 leaves in the woods. How many shells and rocks did Alex find on the beach?

C. For a building project, the carpenter needs 32 nails and 56 screws. The carpenter has 2 hammers. How many nails and screws does the carpenter have altogether?





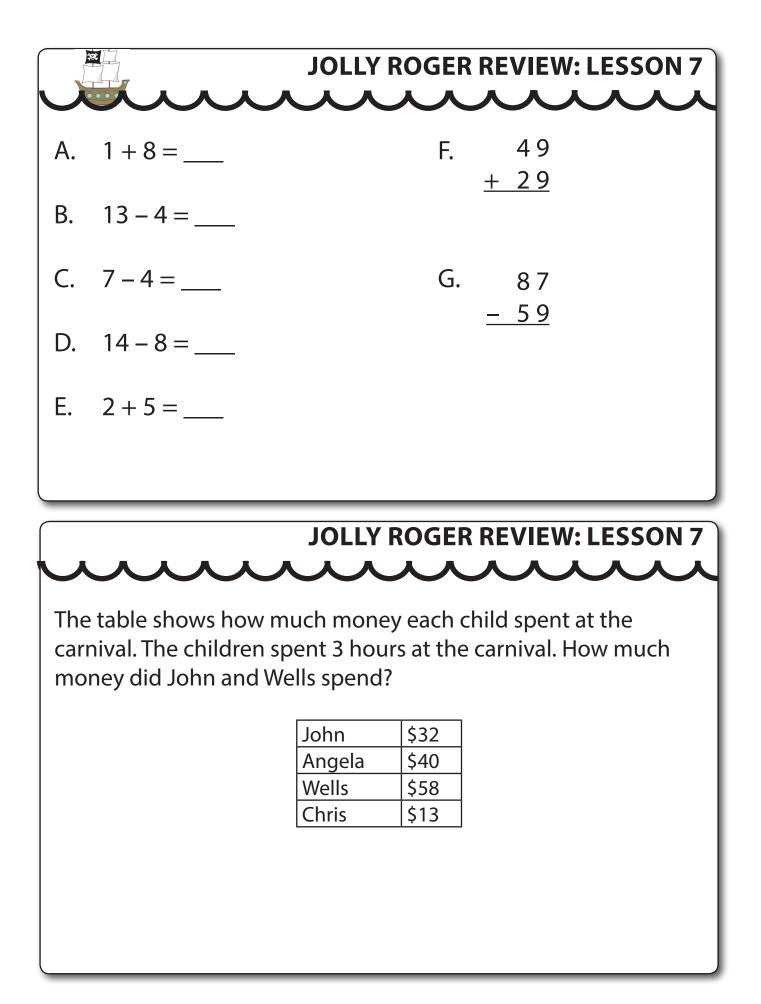


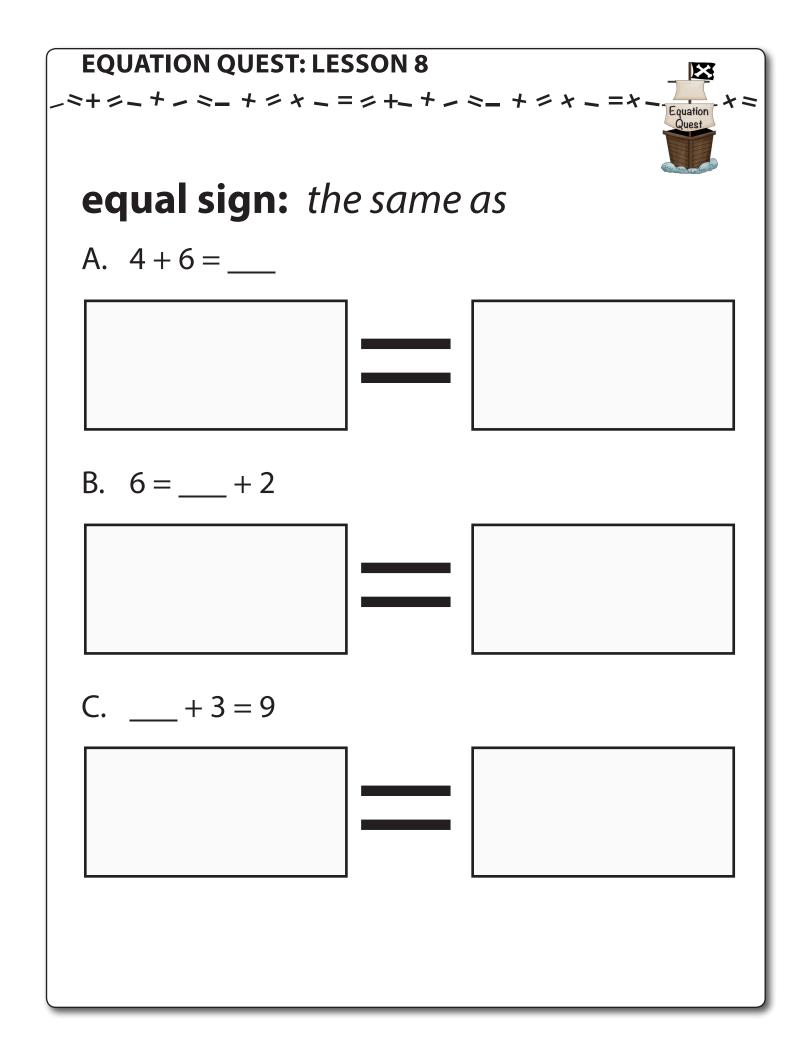
BUCCANEER PROBLE	MS: LESSON 7
-------------------------	--------------

A. Sam and Brandon packed 10 boxes. Brandon packed 3 boxes. How many boxes did Sam pack? B. The table shows the animals on Farmer Mack's farm. If he has 15 cows and horses, how many cows does he have?

Horses	7
Pigs	3
Cows	
Goats	2

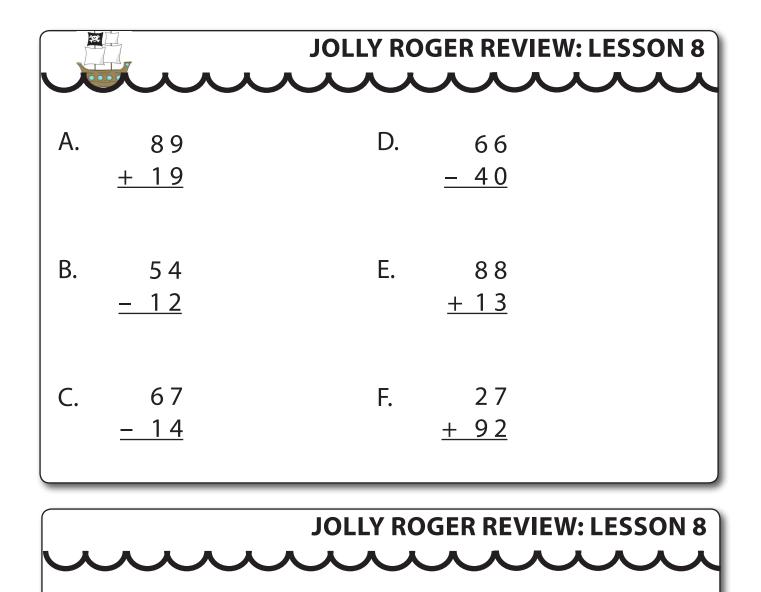
C. The baker has 42 chocolate and strawberry cupcakes. If 26 of the cupcakes are chocolate, how many are strawberry?



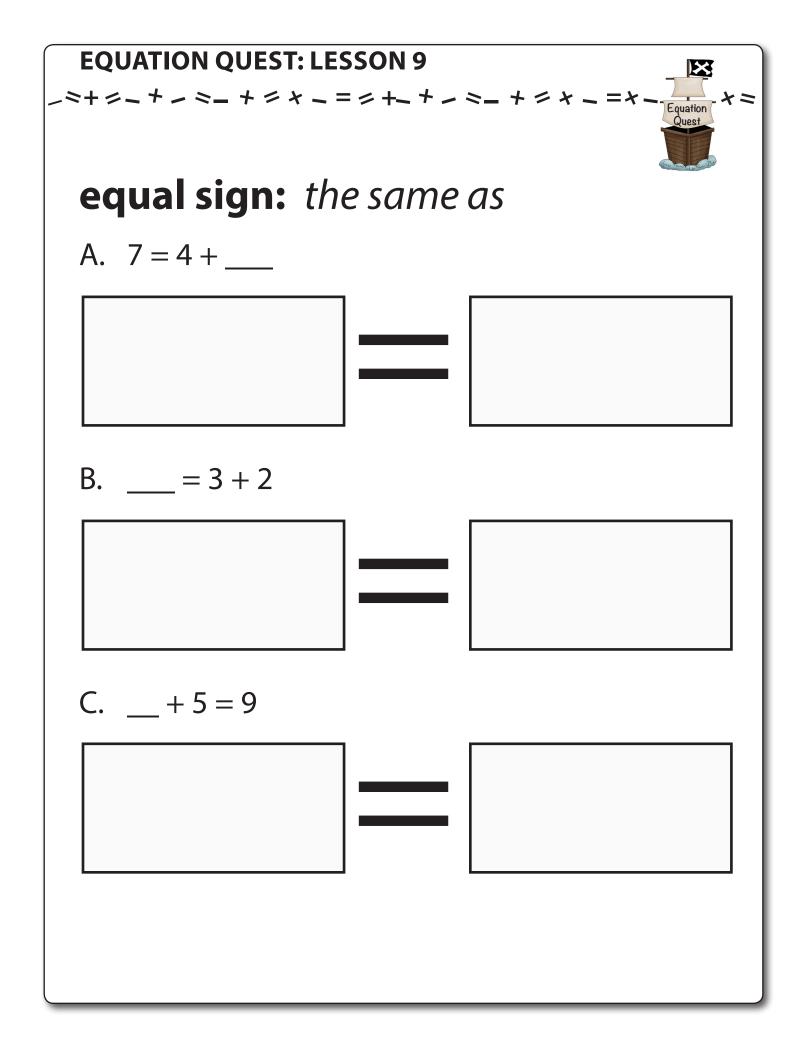


A. James rode his bike 14 miles on Saturday. Then, he rode 23 miles on Sunday. How many miles did James ride his bike? B. 58 c. 91 D. E. 14 <u>+ 23</u>

G. 29 + 60	
н. 25 <u>+ 64</u>	



Vanessa and Diego ate 46 tacos. They ate 2 bowls of queso. If Diego ate 12 tacos, how many tacos did Vanessa eat?

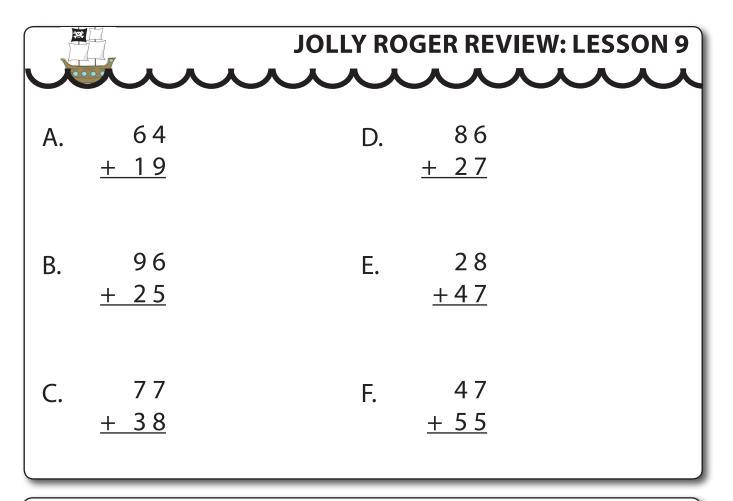


A. Sarah scored 26 points in the basketball game on Saturday. On Sunday, she scored 37 points. How many points did she score in both games?

B.

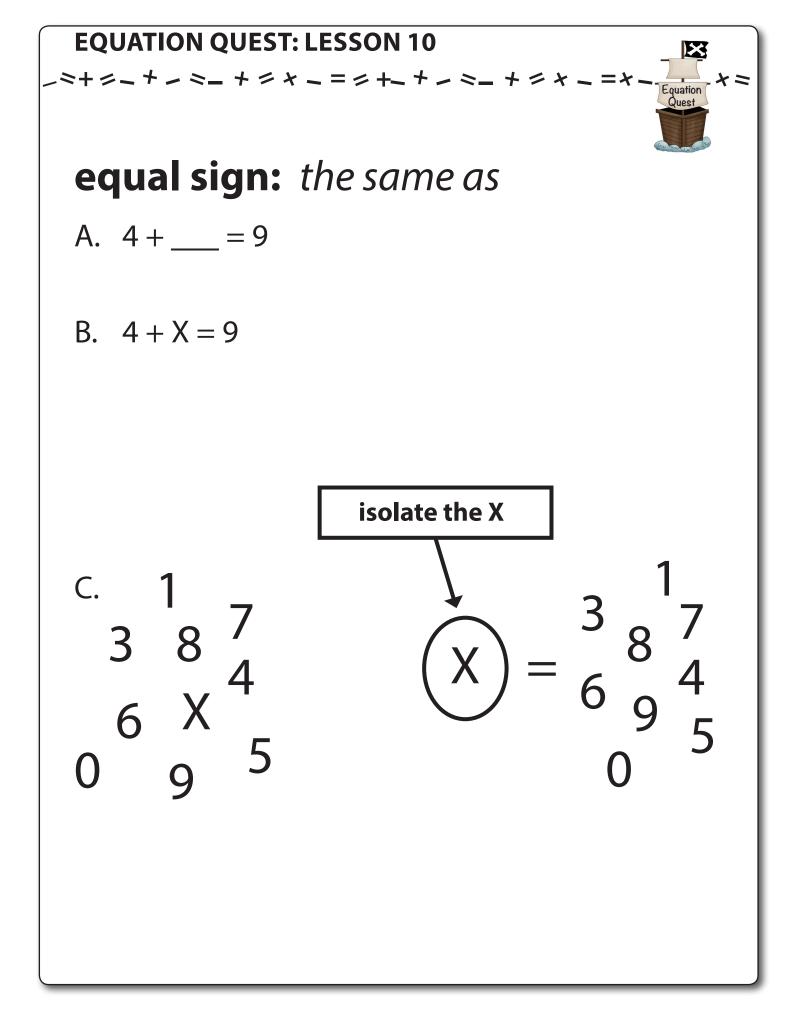
26 + <u>37</u>

C.	64 <u>+ 28</u>	
D.	32 <u>+21</u>	
E.	53 <u>+27</u>	
F.	45 <u>+53</u>	
G.	38 <u>+ 23</u>	





Ray ran 29 miles. Heidi ran 16 miles. How many miles did Ray and Heidi run?

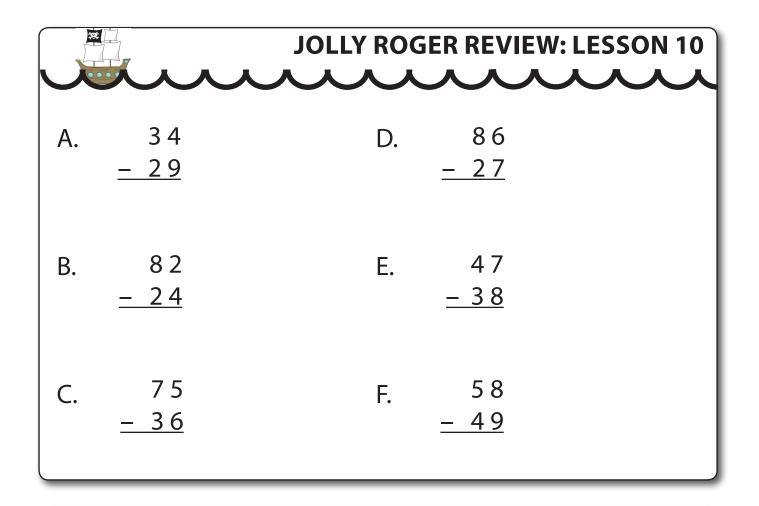


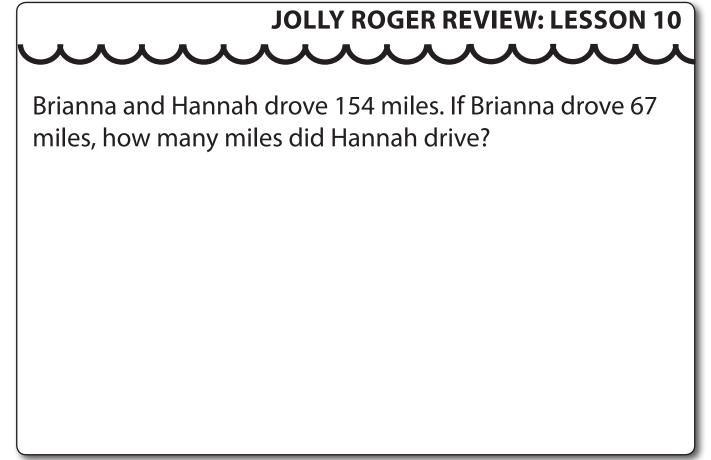
A. Jessica spent \$67 to buy some movies and music. If she spent \$24 on movies, how much did she spend on music?

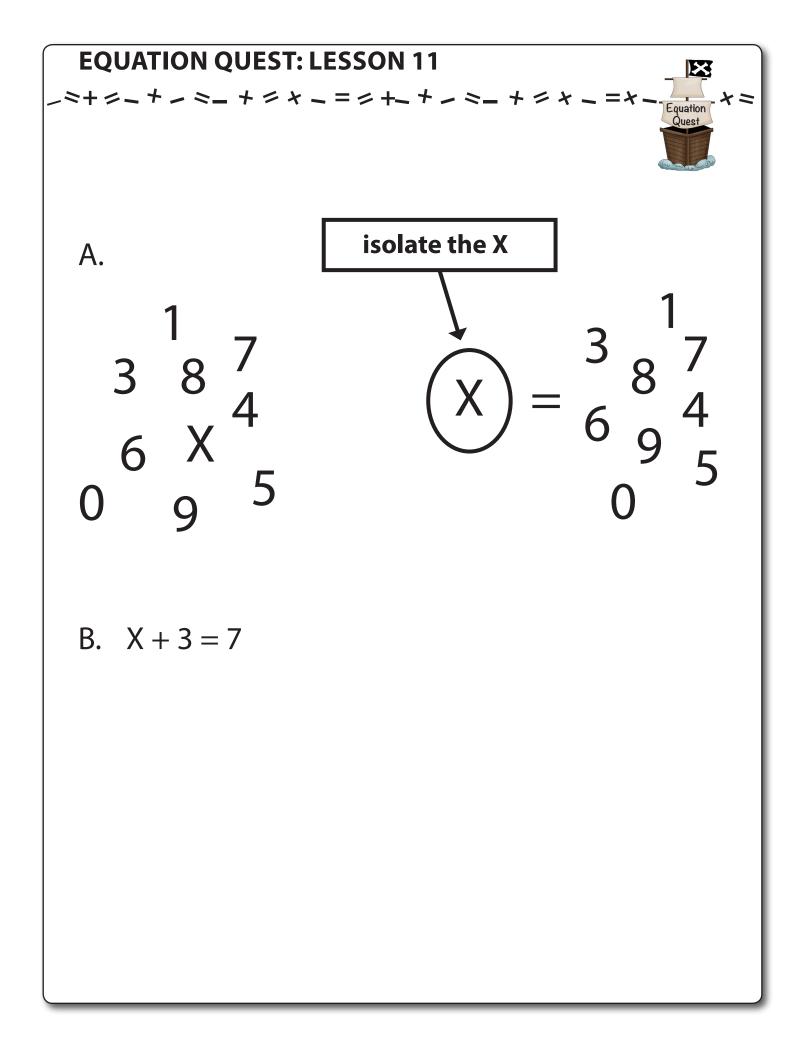
Β.

67 - 24

С.	58 <u>- 31</u>	
D.	53 <u>-28</u>	
E.	72 <u>- 45</u>	
F.	54 <u>- 22</u>	
G.	96 <u>- 58</u>	

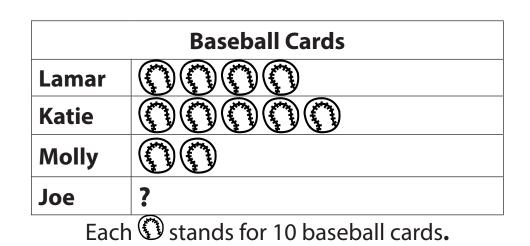






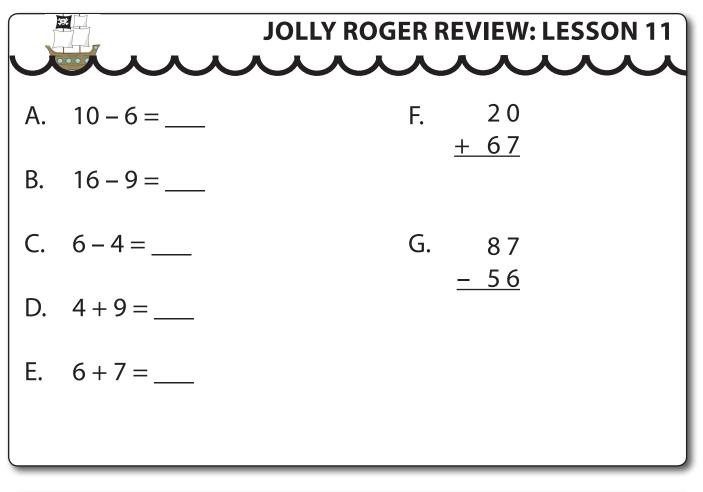
A. Tanner spent \$27 on snacks and drinks. He bought 5 kinds of snacks. If Tanner spent \$19 on snacks, how much money did he spend on drinks?

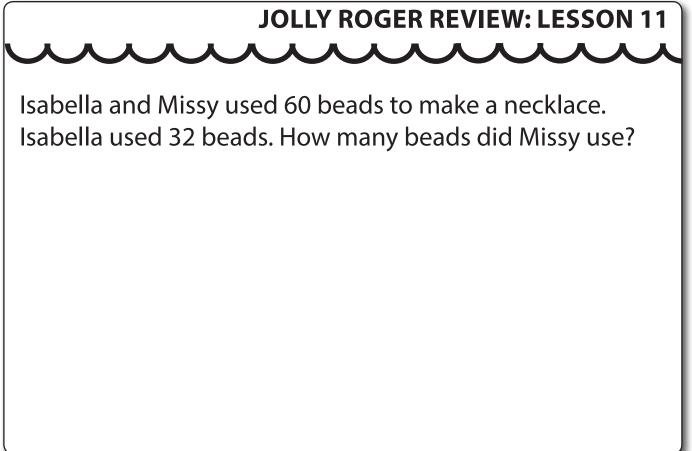
Β.

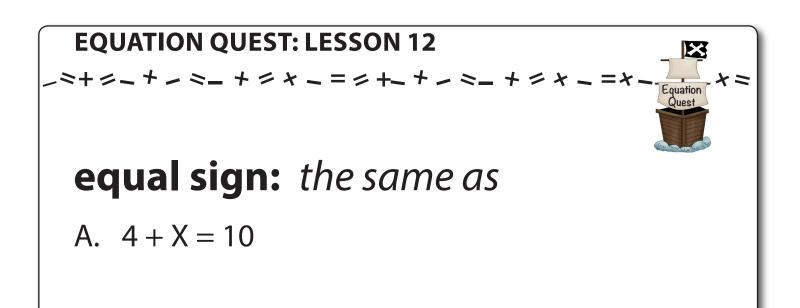


Lamar and Joe have 70 baseball cards together. How many cards does Joe have?

C. The Oz family has 3 children. They also have 9 cats and dogs. If the family has 4 cats, how many dogs does the family have?







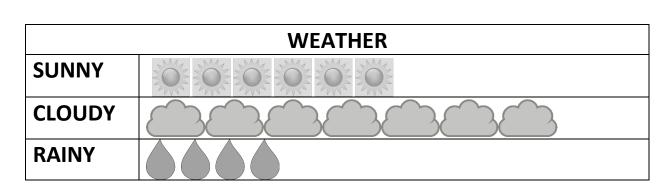
B. 6 + 9 = X



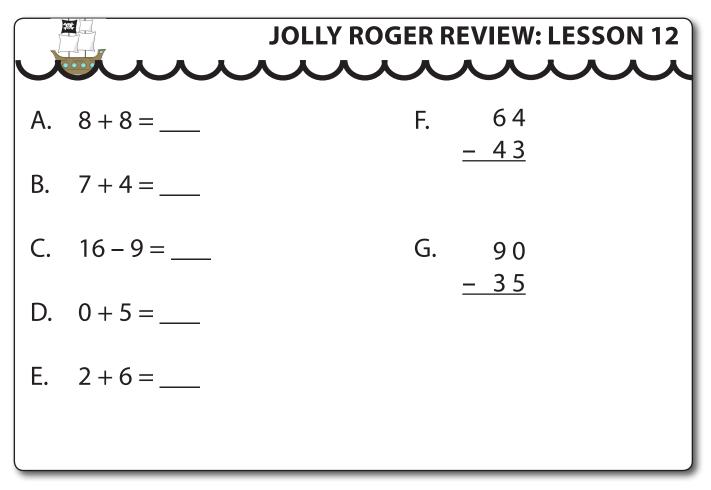
A. Webster made \$28 from mowing lawns and \$68 from walking dogs. How much money did he make in all?

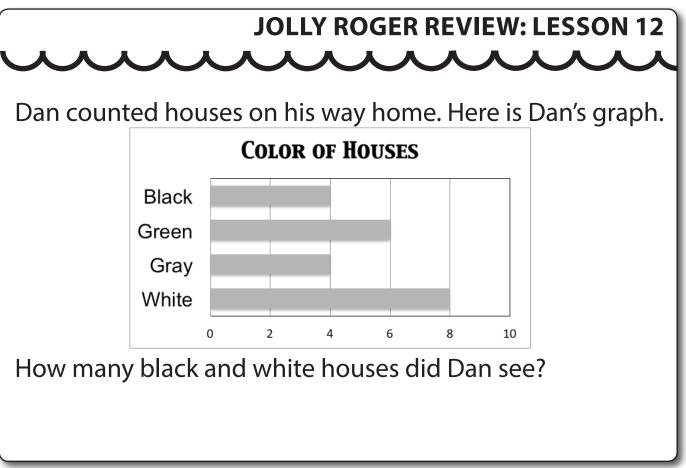
B. The Miller family has 28 cows and chickens on their farm. They also have 4 tractors. If they have 12 chickens, how many cows do they have?

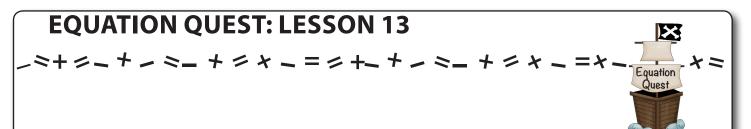
C.



What is the total number of sunny and rainy days?







equal sign: the same as

A. 5 + X = 9

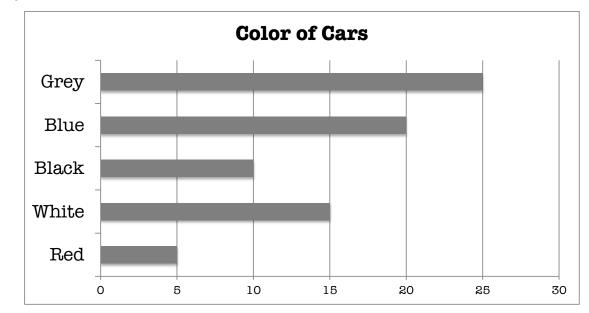
B. 14 + X = 25



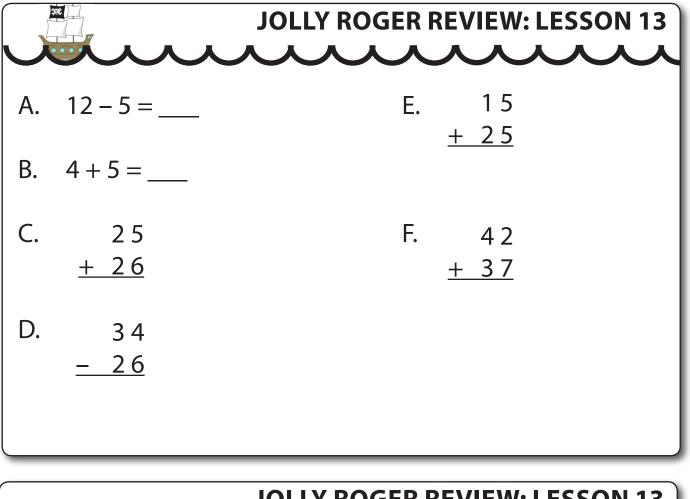
A. Mr. Andrews grew 17 carrots and some peppers. He grew 44 vegetables in all. How many peppers did Mr. Andrews grow?

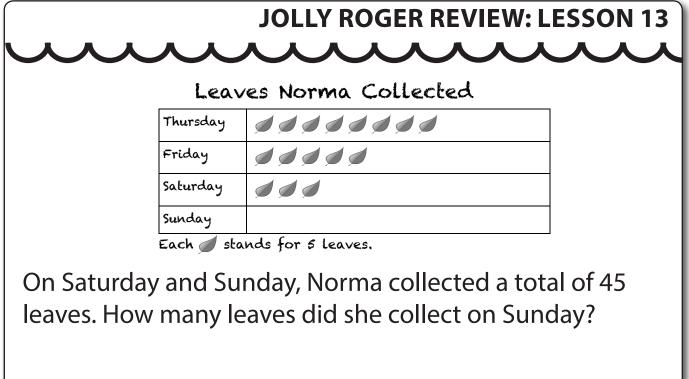
B. Sierra and Dante made brownies for the school bake sale. They baked a total of 84 brownies. If Dante baked 48 brownies, how many did Sierra bake?

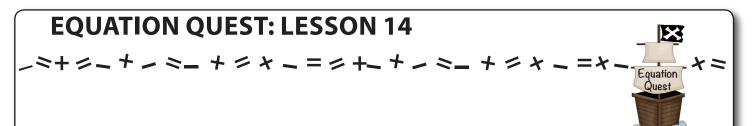
C. Mila counted cars on her walk home from school. Here is Mila's graph.



How many white and grey cars did Mila see?







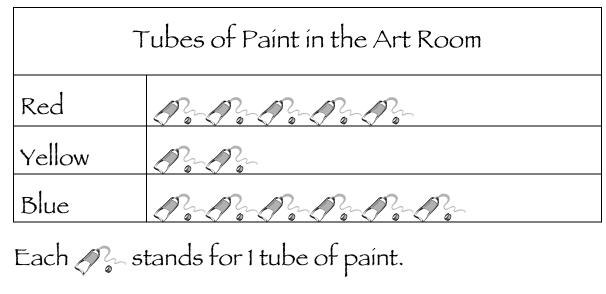
equal sign: the same as

A. 29 + X = 45

B. 31 = X + 16

A. Alex found 4 red leaves, 3 orange leaves, and 5 yellow leaves during a walk in the woods. How many leaves did he find in all?

B.

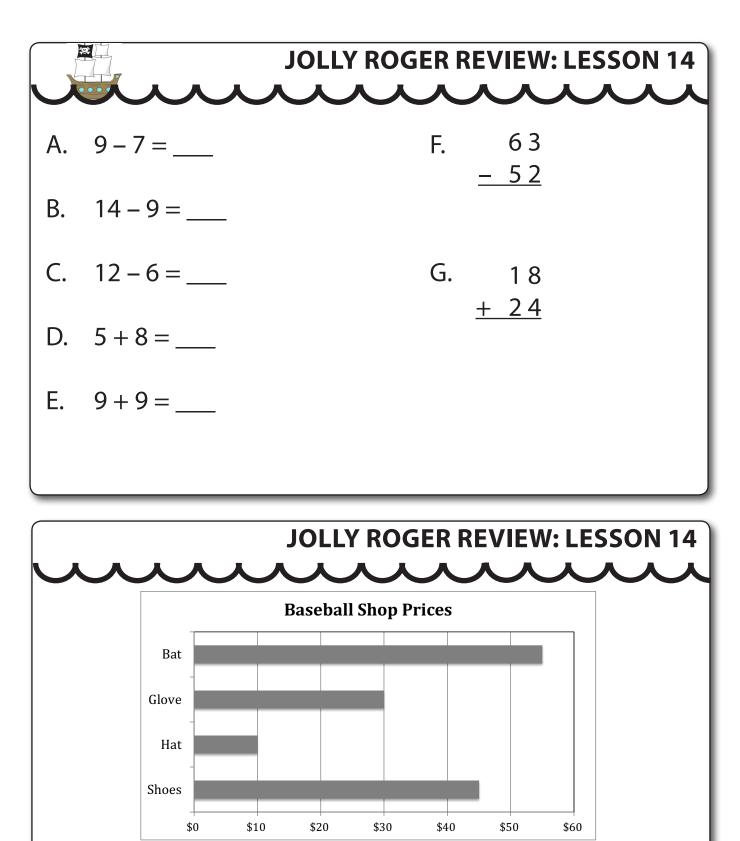


How many tubes of paint are in the art room?

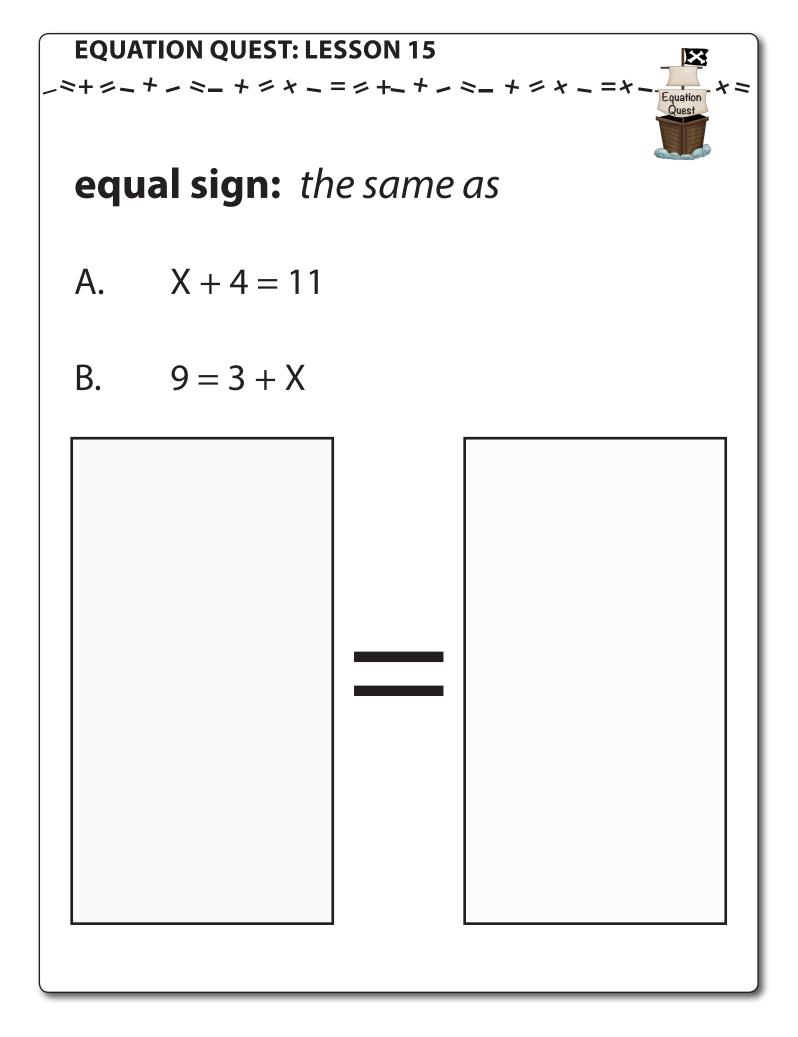
C. The table shows how much money each person spent at the grocery store.

Truman	\$32
Lincoln	\$40
Jackson	\$58
Carter	\$13

How much did Carter, Truman, and Lincoln spend?



Manuel wants to buy a baseball bat, glove, and hat. How much money does he need?



A. Katie has 14 goldfish and 13 rainbow fish. Jim has 22 clown fish. How many fish do they have in all?

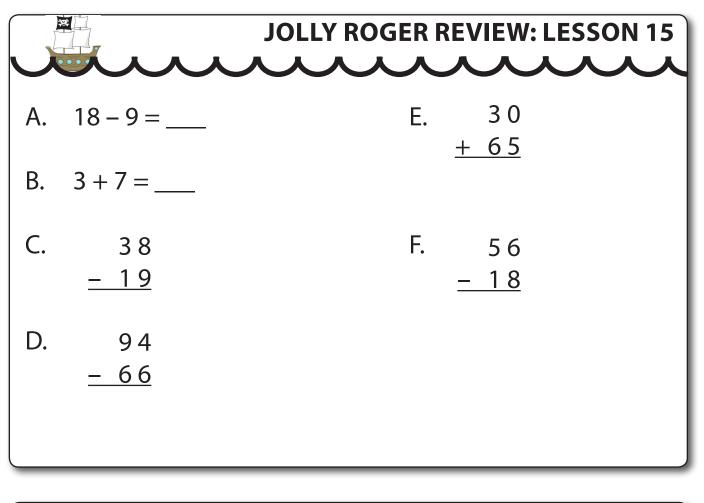
B. Mrs. Chan packed 34 sandwiches for the picnic. She also packed 6 cookies. If she packed 17 ham sandwiches, how many peanut butter sandwiches did she pack?

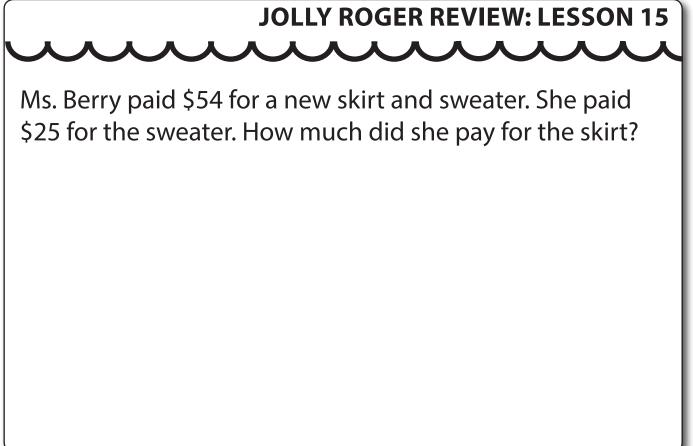
C <u>.</u>					
	Prices at the Burger Shack				
Burger	\$ \$ \$ \$				
Soda	?				
Fries	\$ \$ \$				

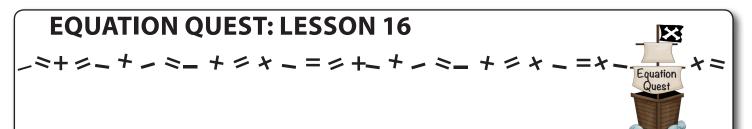


Each 🏐 stands for \$1.

Jamie spent \$7 on a burger and a soda. How much did the soda cost?



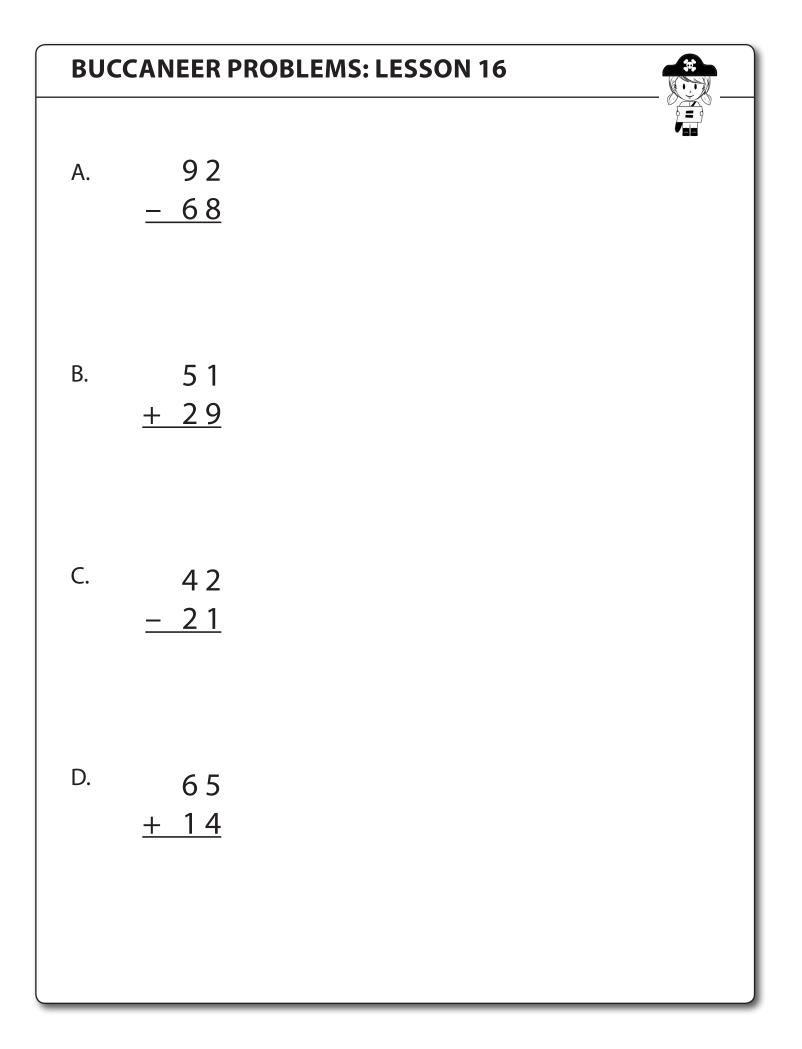




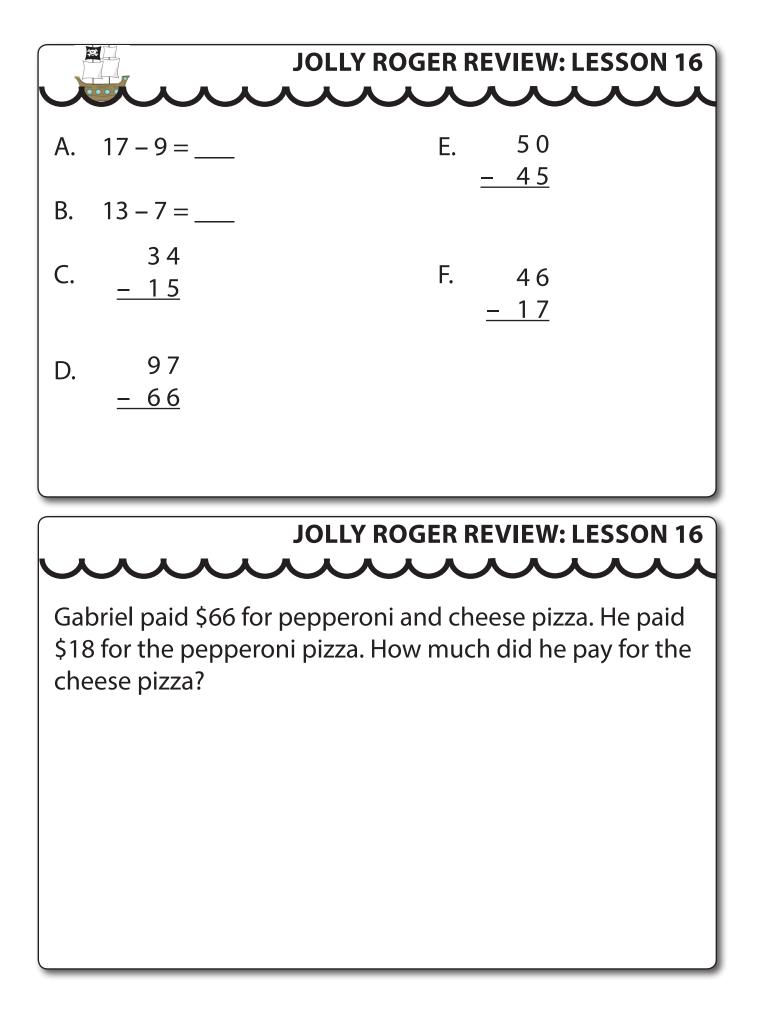
equal sign: the same as

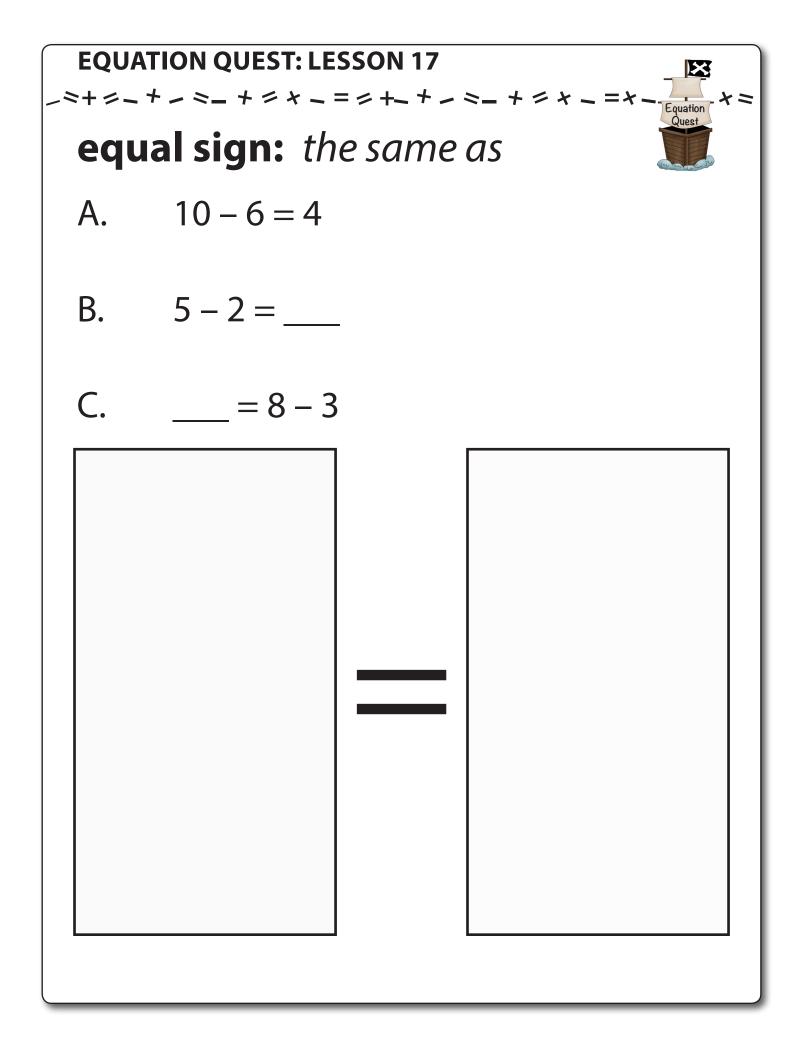
A. 62 = X + 14

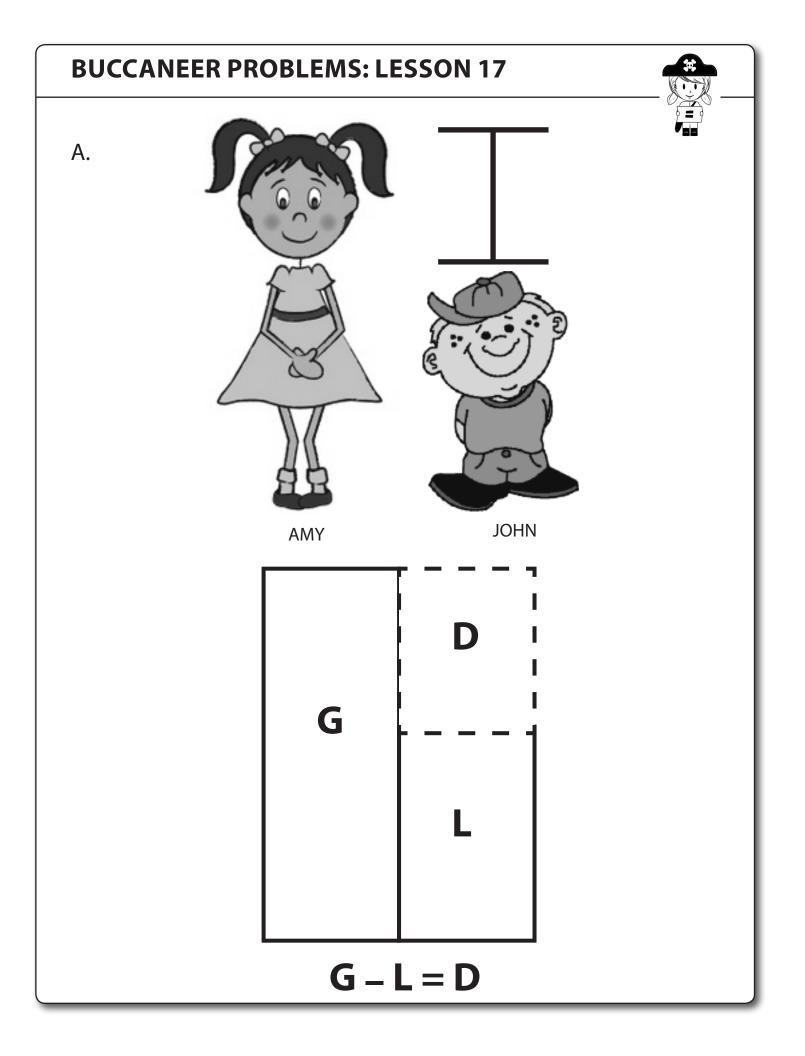
B. X + 25 = 76



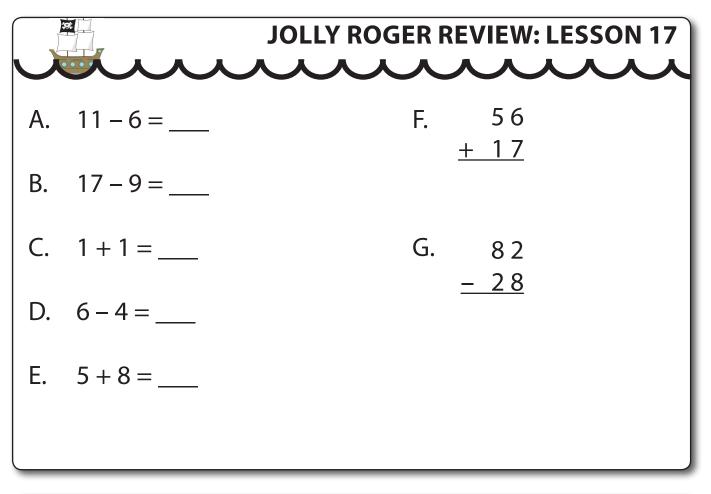
E.	75 <u>- 27</u>	
F.	80 <u>- 46</u>	
G.	15 <u>+ 48</u>	
H.	37 <u>+ 62</u>	
Ι.	96 <u>- 58</u>	

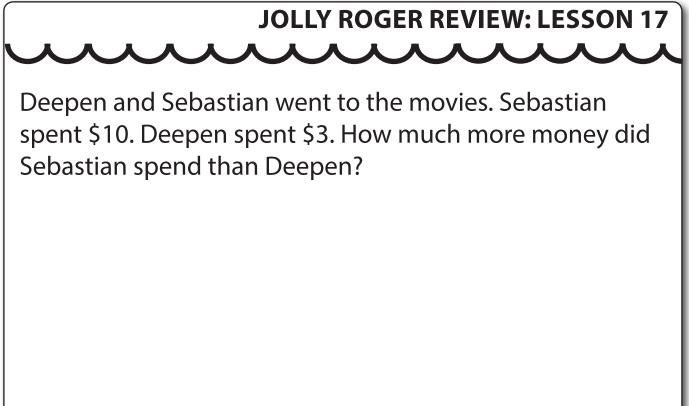


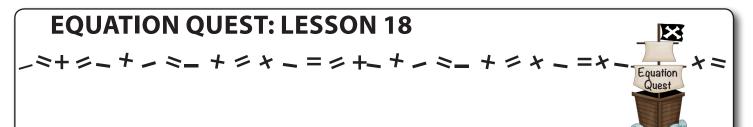




B. Kim scored 7 goals in Friday's soccer game. She scored 5 goals in Saturday's soccer game. How many more goals did she score on Friday?







equal sign: the same as

A. 15 + X = 63

B. 8 - 3 = X

A. Maya has 7 more pets than Paul. Paul has 3 pets. How many pets does Maya have?

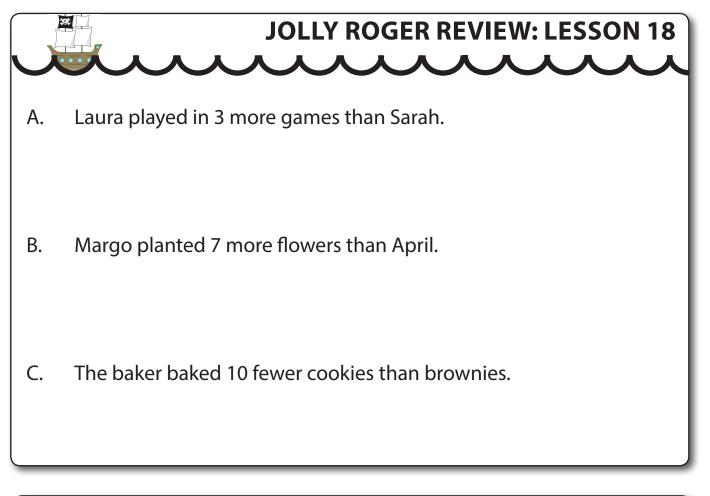
B. Maya is 7 years old. Paul is 3 years old. How many years older is Maya?

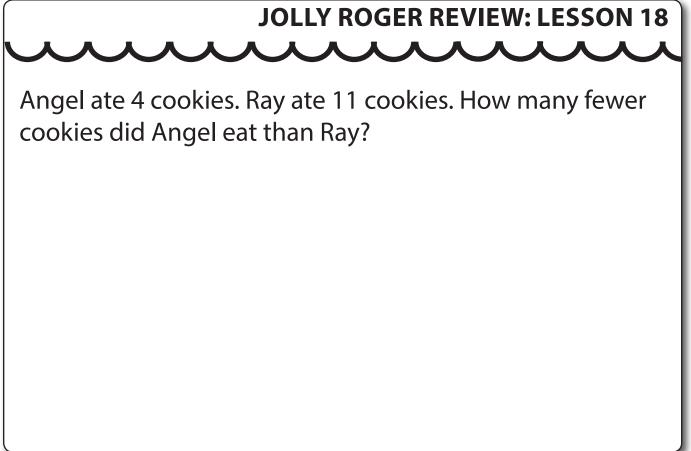
C. The giraffe is 5 feet taller than the monkey.

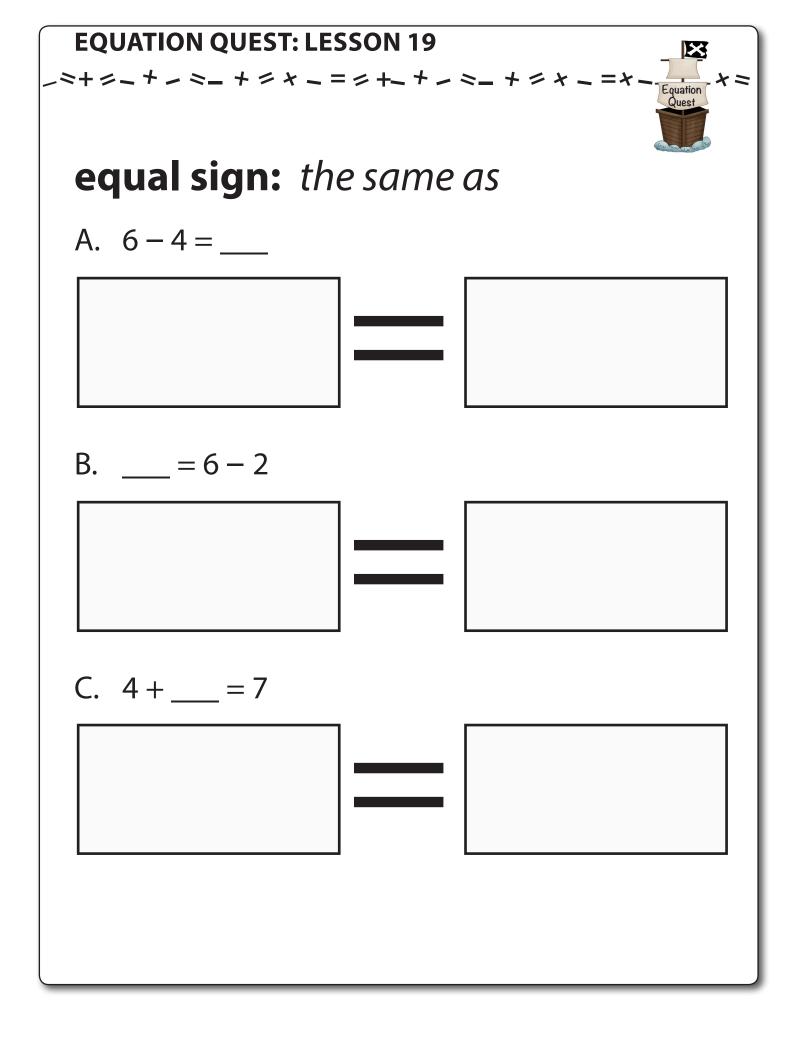
D. Today is warmer than yesterday.

E. The shark swims faster than the dolphin.

F. Maya is 7 years old. Paul is 3 years old. How many years older is Maya?



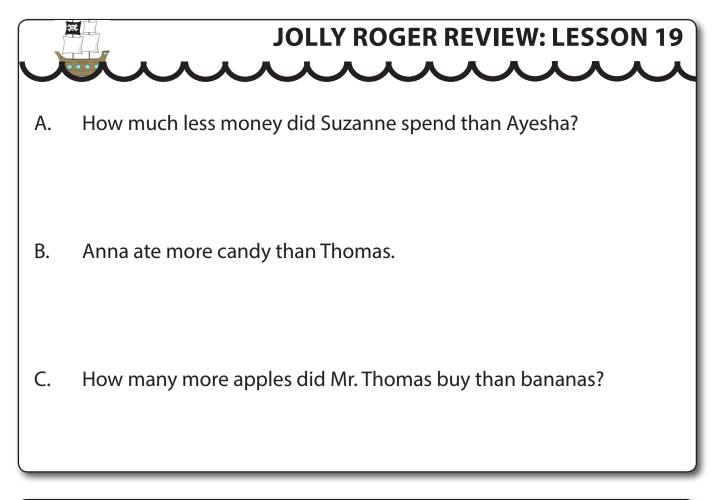


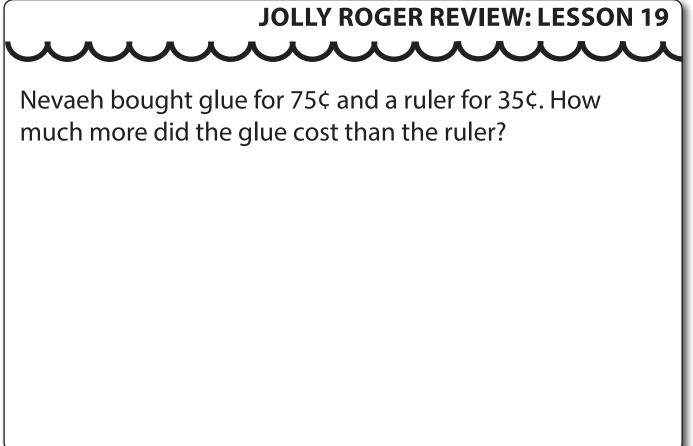


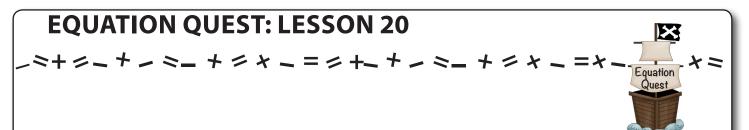
A. Stan has seen 3 fewer movies than Joey.

B. 8 dogs are running in the park. 4 dogs are sleeping in the grass. How many more dogs are running than sleeping?

C. 8 dogs are running in the park. 4 dogs are sleeping in the grass. How many dogs are there?



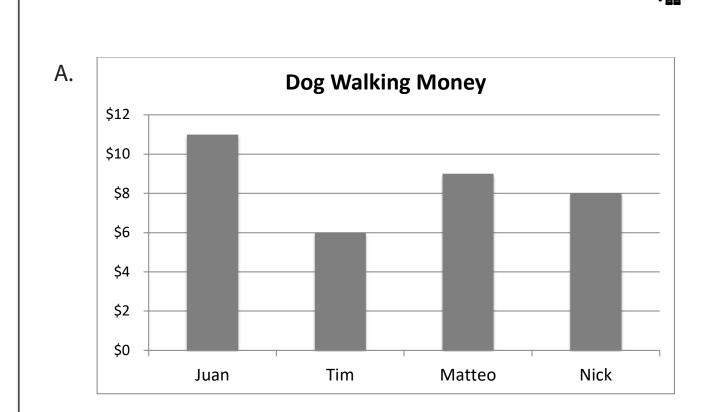




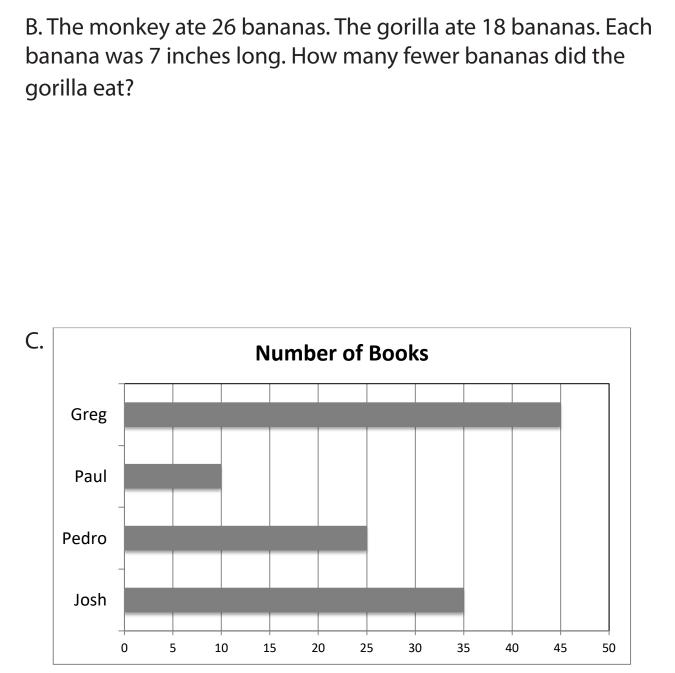
equal sign: the same as

A. 24 + X = 61

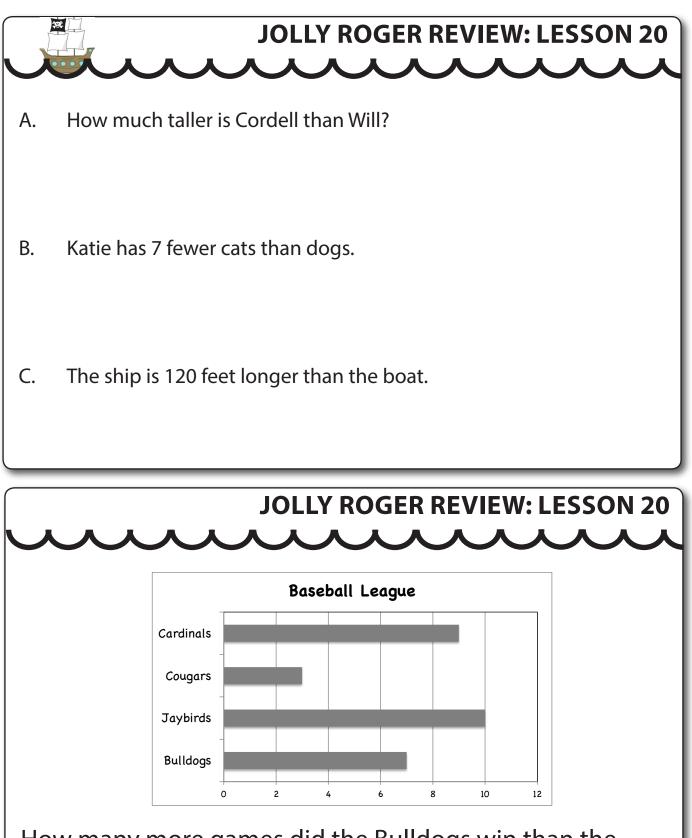
B. 16 - 9 = X



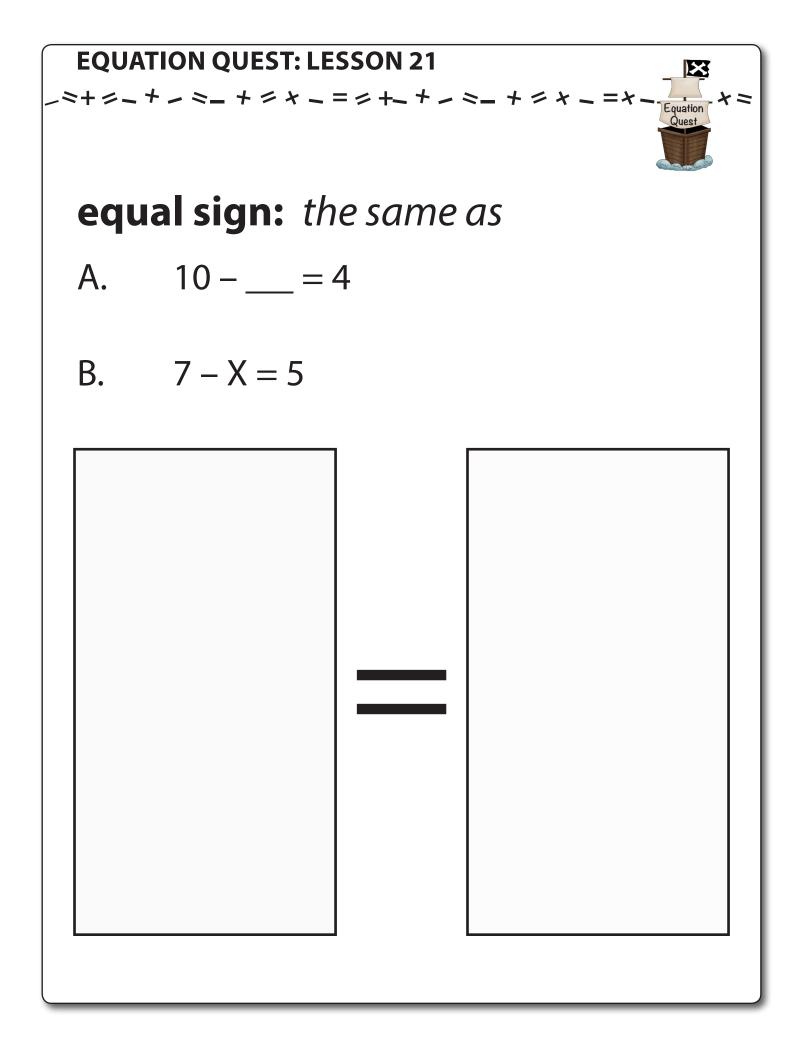
How much less money did Tim earn than Juan?



This graph shows the number of books some students have read. How many books have Josh and Pedro read?



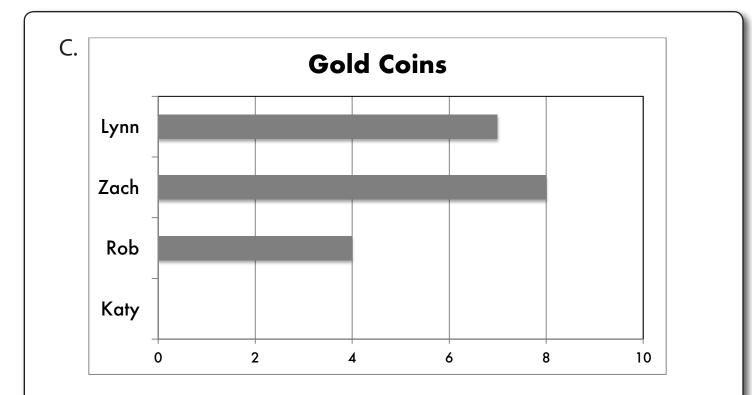
How many more games did the Bulldogs win than the Cougars?



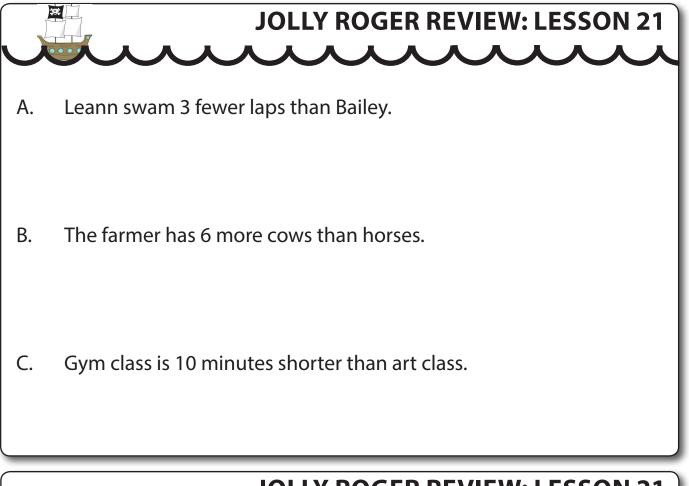


A. Abby has 3 flowers. Nat has 7 flowers. How many more flowers does Nat have?

B. Nat has 7 flowers. Abby has 4 fewer flowers than Nat. How many flowers does Abby have?

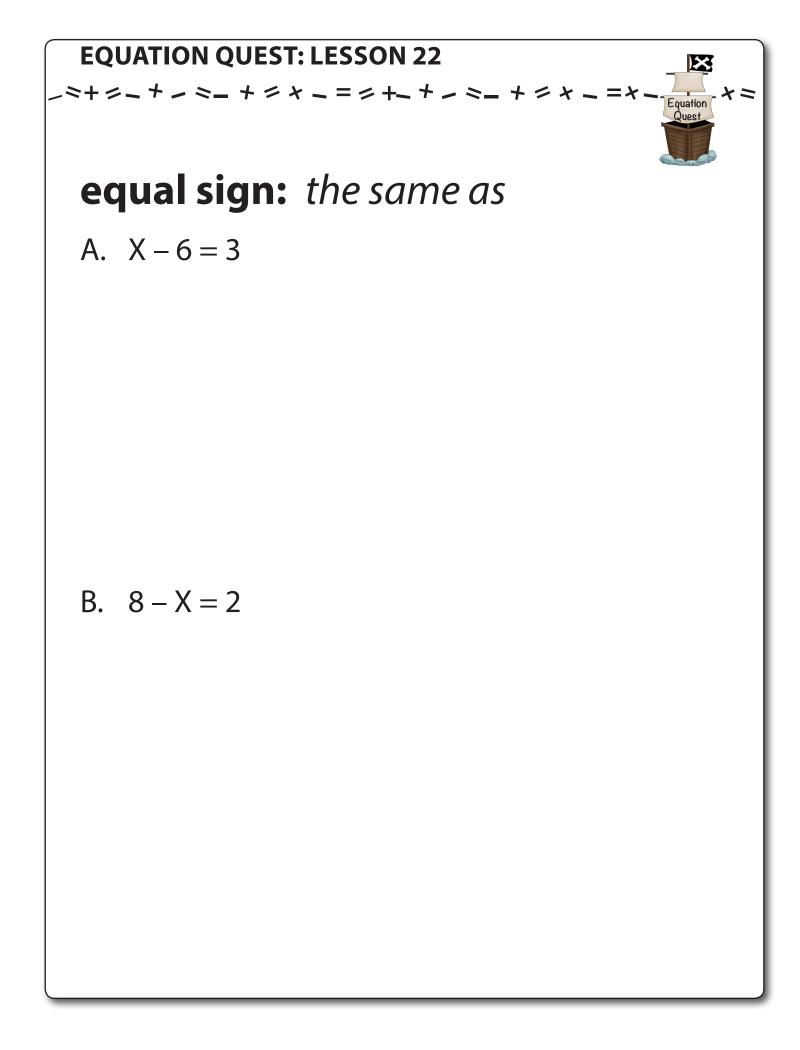


Lynn earned 2 more gold coins than Katy. How many gold coins did Katy earn?





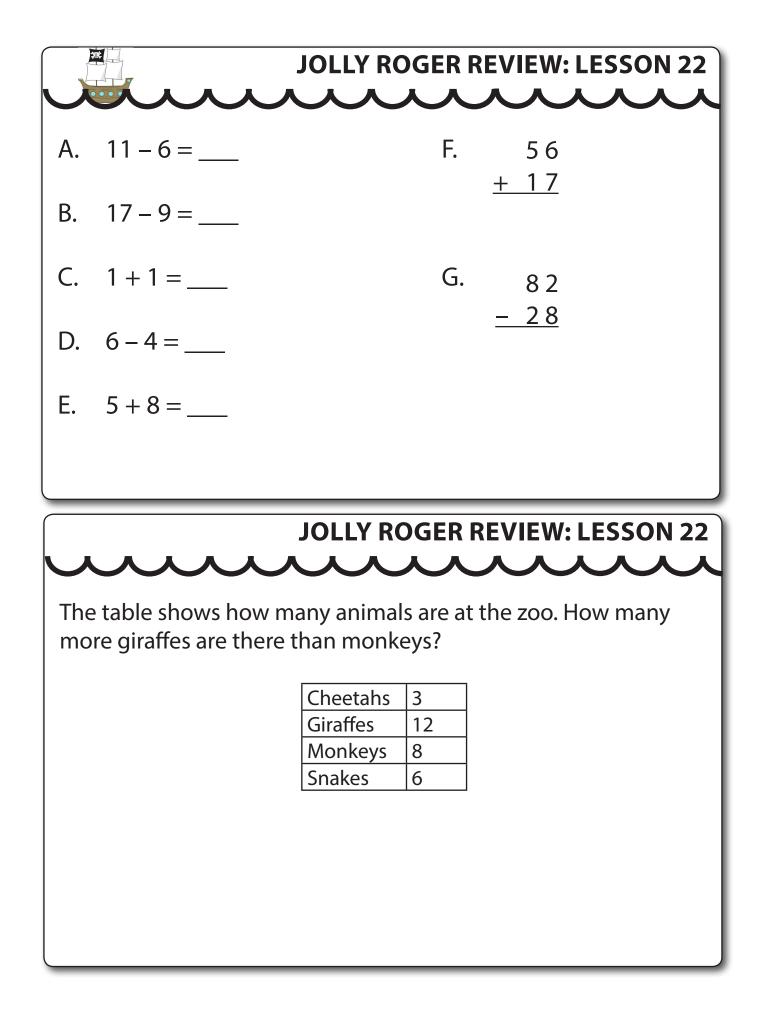
Rekha has 12 toy cars. Zara has 7 fewer toy cars. How many toy cars does Zara have?

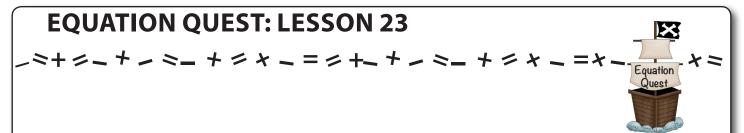


A. Susan made \$7 selling lemonade. Mike made \$4 less than Susan. How much money did Mike make?

B. Mike and Susan made \$10 selling lemonade. Susan made \$7. How much money did Mike make? C. Beth spent \$5 less than John on pizza. How much money did Beth spend on pizza?

\$ Beth spent on pizza	
\$ Beth spent on candy	\$8
\$ John spent on pizza	\$12
\$ John spent on candy	\$6





equal sign: the same as

A. 9 - X = 4

B.
$$X - 6 = 4$$

A. Pat and Liz weigh 90 pounds together. Pat weighs 50 pounds and is 4 feet tall. How much does Liz weigh?

Β.

Sports Games Dan Played					
Basketball					
Baseball	Annual and Annual A				
Soccer	?				

Each ball stands for 5 games.

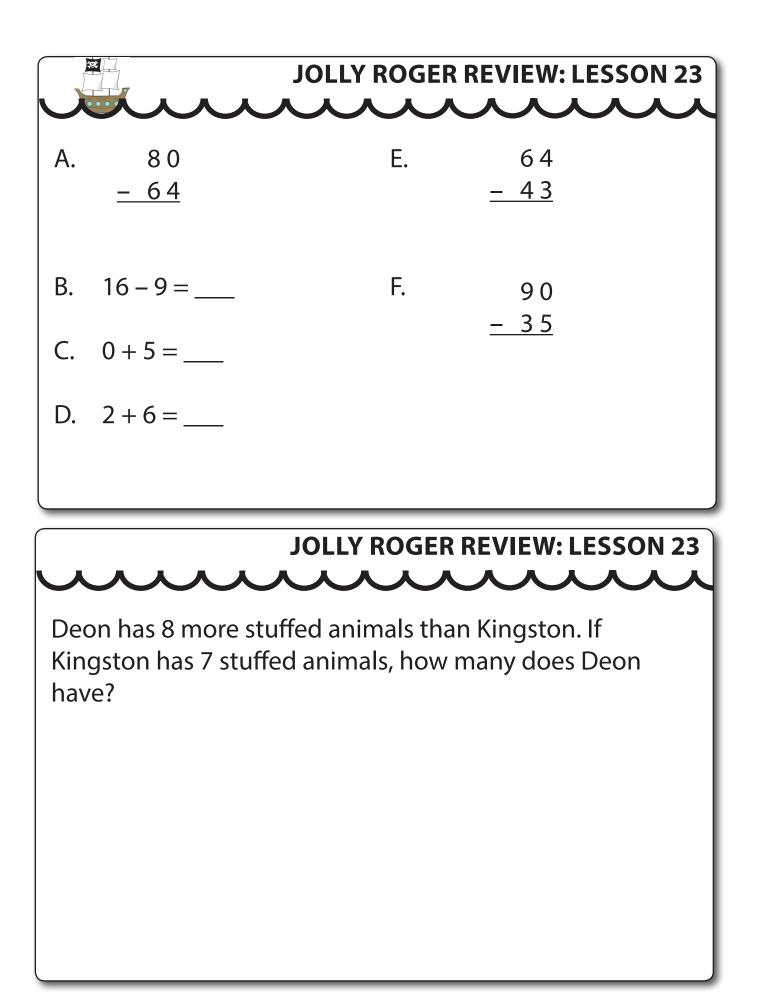
Dan played 10 more soccer games than basketball games. How many soccer games did he play?

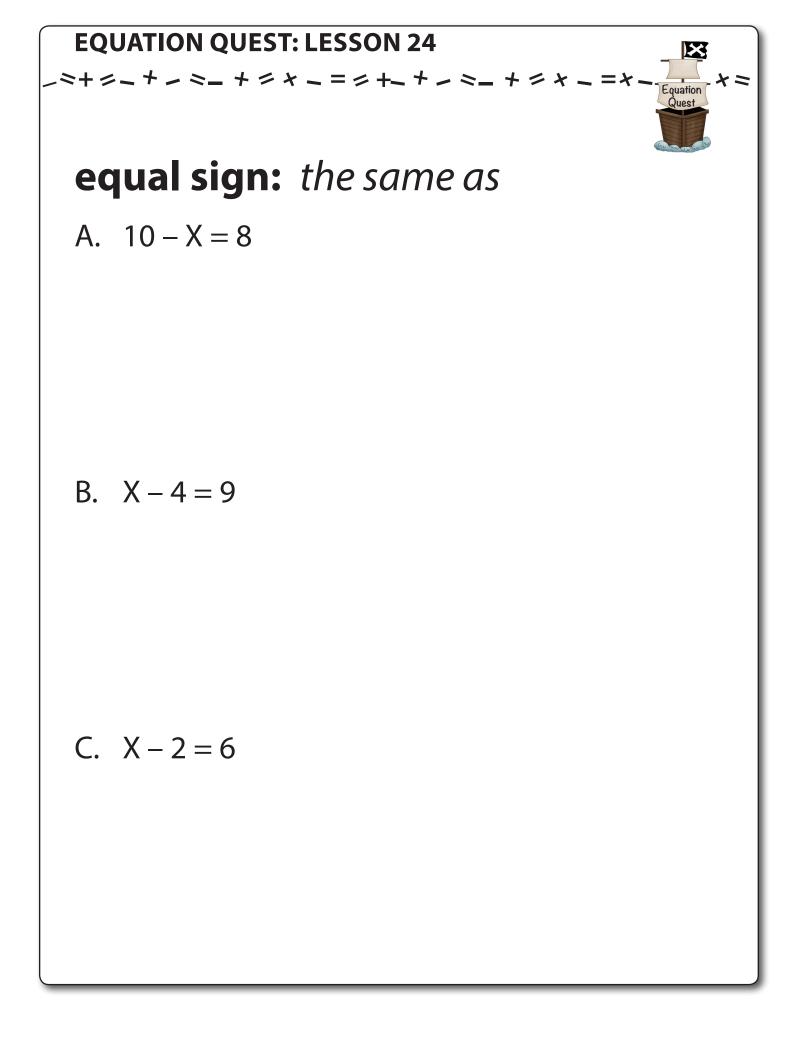
C.

Prices at School Store							
Folder							
Glue							
Notebook							
Ruler	?						



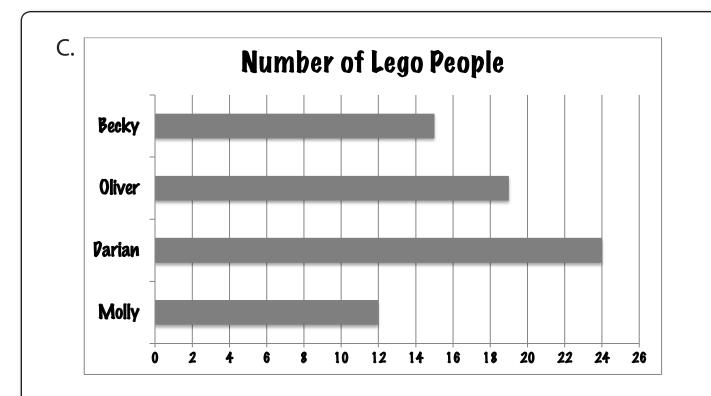
A ruler costs 55¢ more than glue. How much money does the ruler cost?



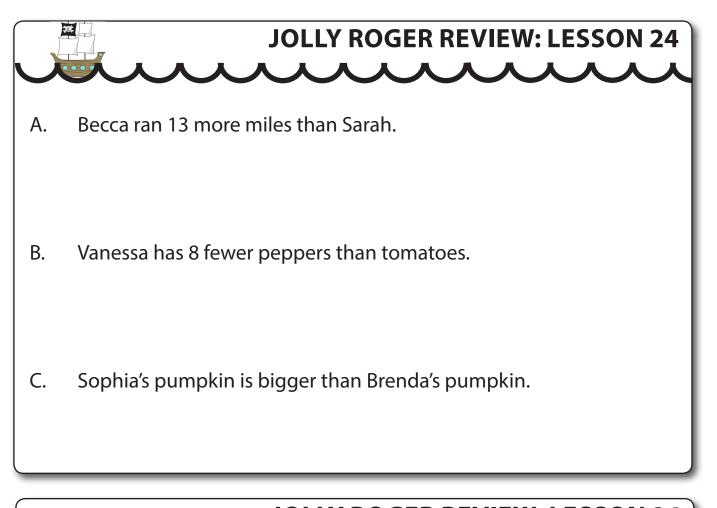


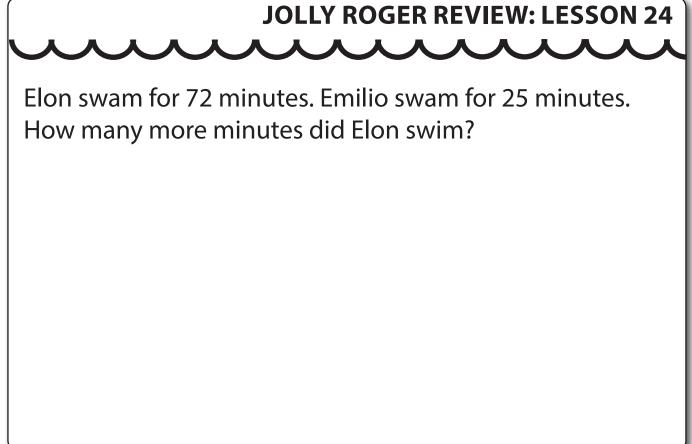
A. Jim picked 62 apples off of the tree. Mark picked 34 apples. They used 3 bags to carry the apples. How many fewer apples did Mark pick than Jim?

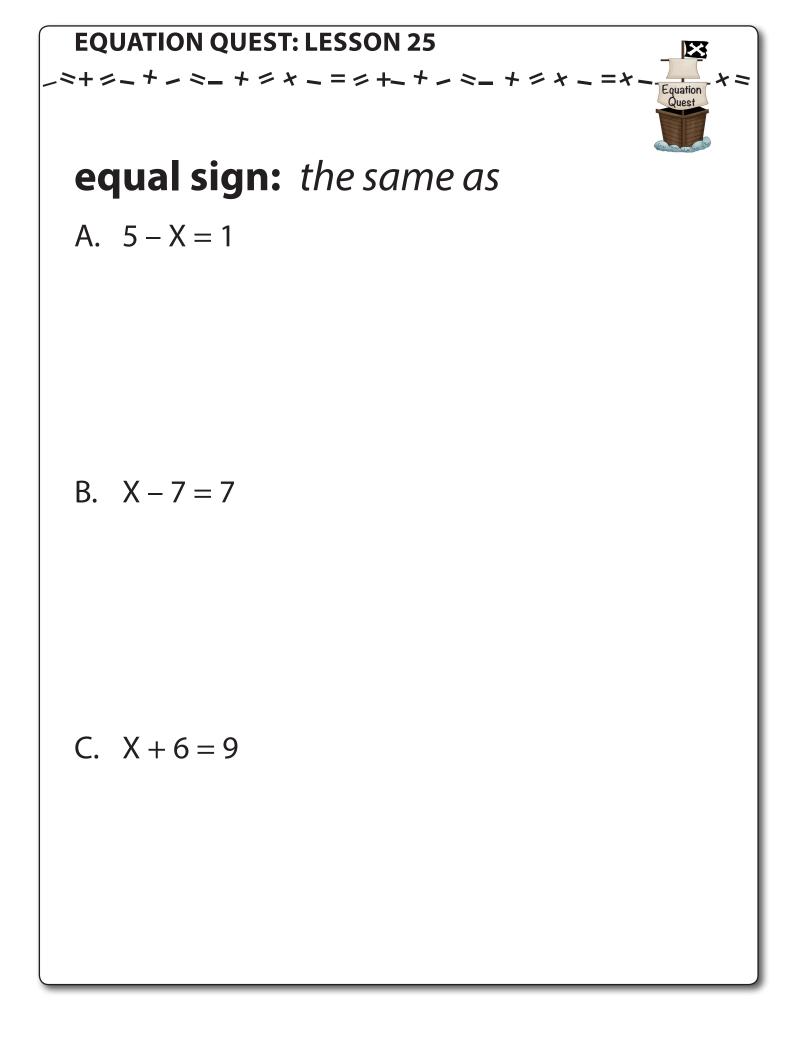
B. The coffee shop had 62 more customers than the bookstore. The bookstore only had 18 customers. How many people went to the coffee shop?



How many Lego people do Darian, Becky, and Molly have altogether?







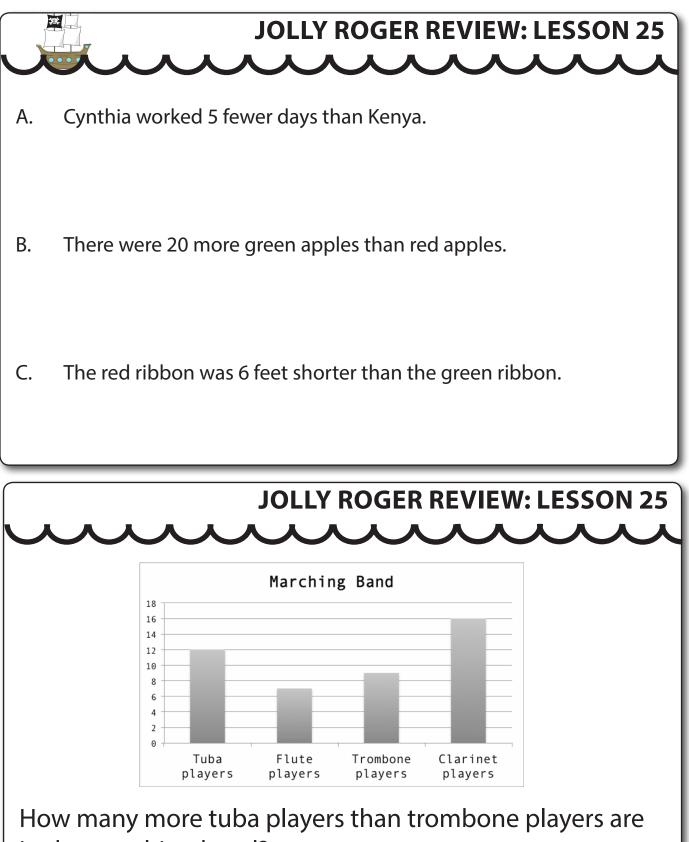


A. Diana and Lynn baked 79 cupcakes for the holiday party. They filled 8 trays with cupcakes. Diana baked 29 cupcakes. How many cupcakes did Lynn bake?

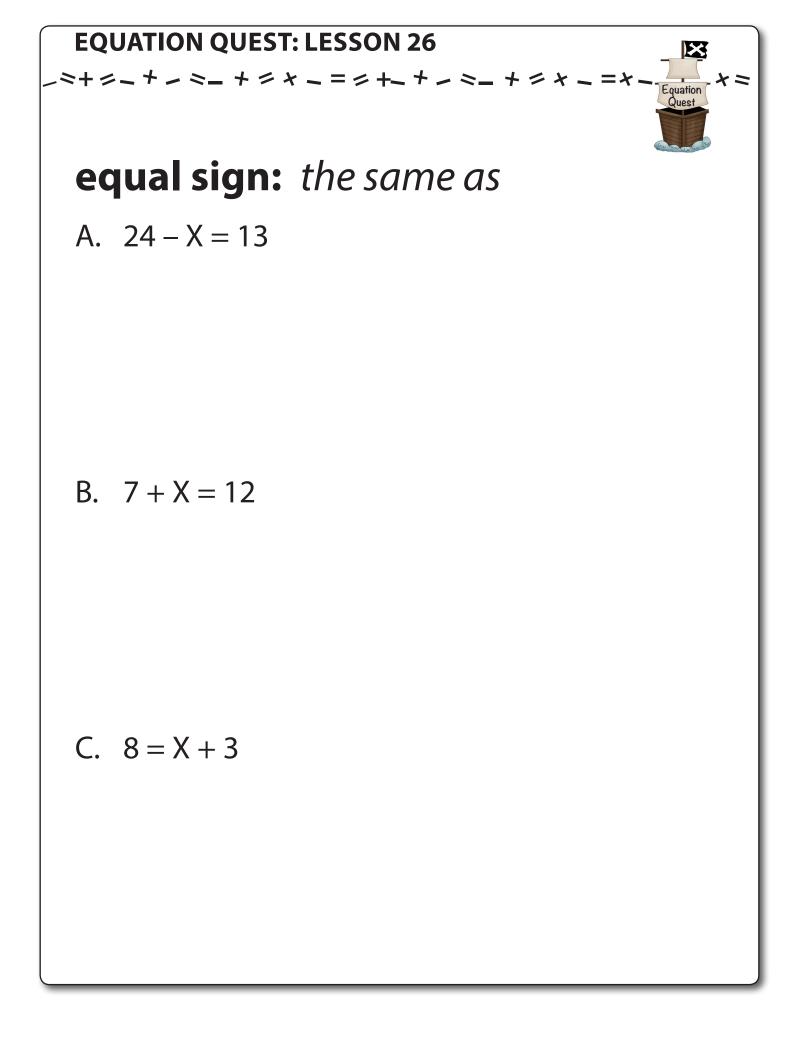
B. Tony visited the Children's Museum 5 fewer times than Martha. If Martha visited the Children's Museum 14 times, how many visits did Tony make?

		Nests	Found	in the W	oods	
John						
Emily	0					
Denny	0					
Silvia						

How many fewer nests did John find than Denny?



in the marching band?

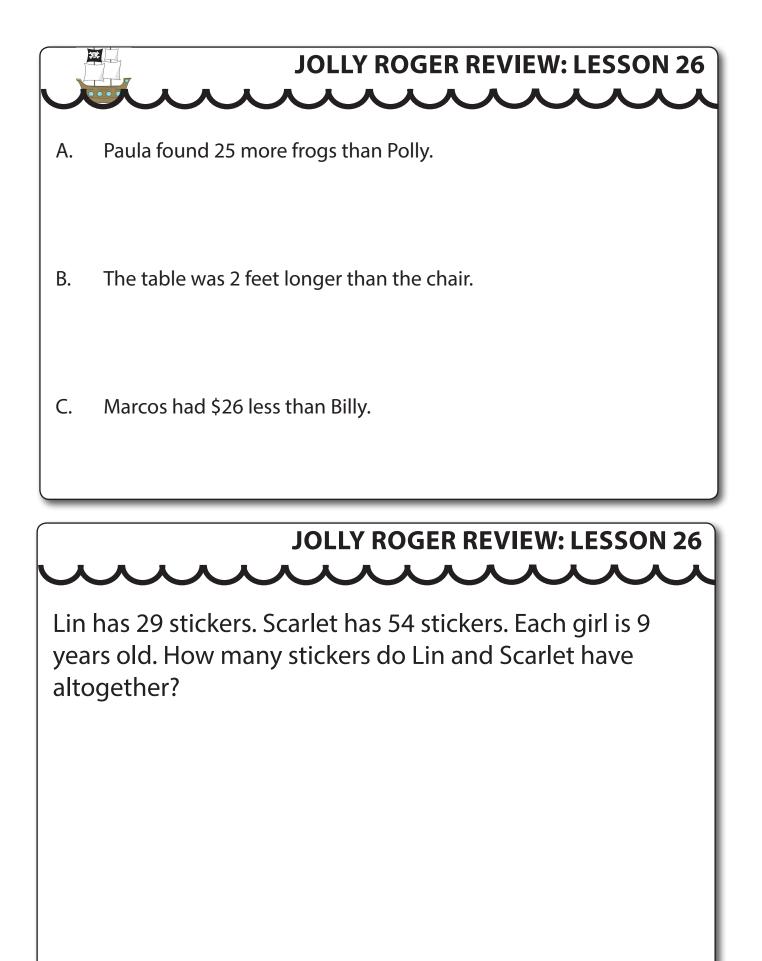


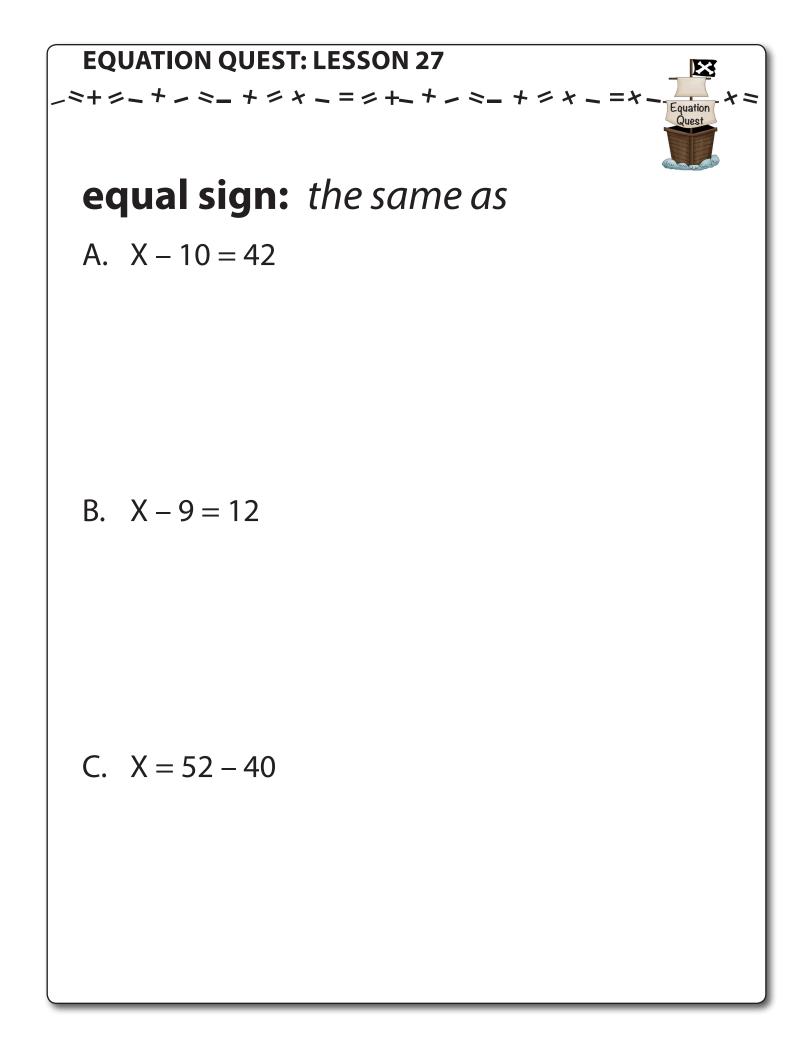
A. Montel read 78 pages of his book yesterday. He read for 3 hours altogether. If he read 39 pages in the morning, how many pages did he read in the afternoon?

B. Abdul caught 15 butterflies. Anish caught 38 butterflies. There were 106 butterflies in the garden. How many fewer butterflies did Abdul catch than Anish?

		Nests	Found	in the W	oods	
John						
Emily	0					
Denny	0					0
Silvia	(O)					

How many nests did Silvia, Denny, and John find?





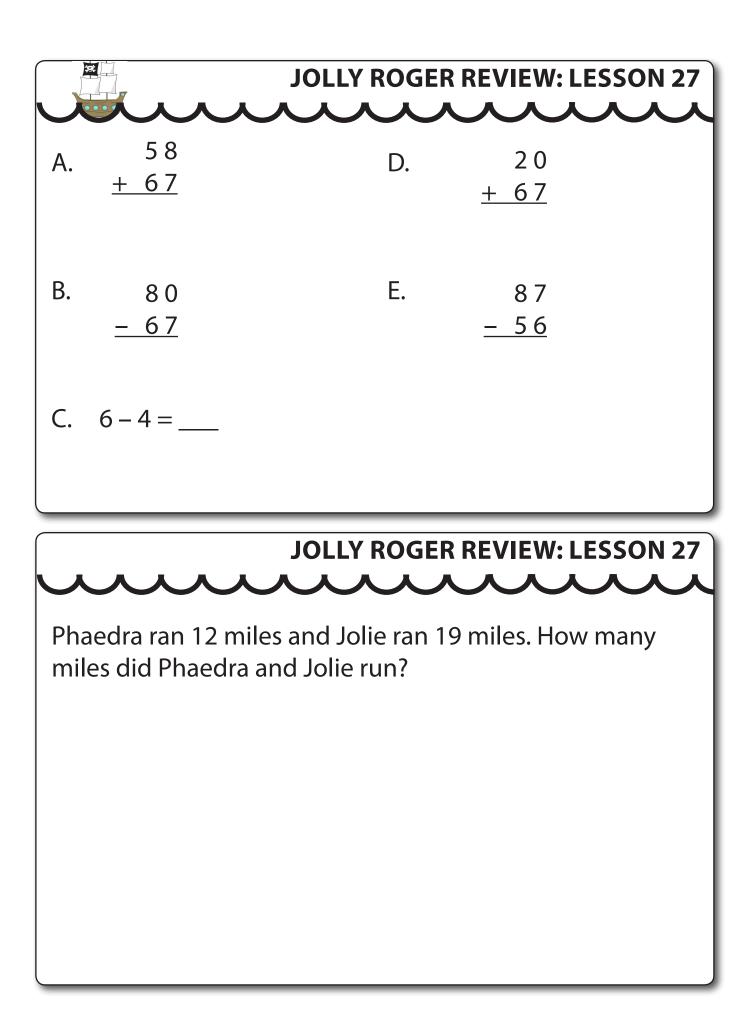
		Noney Ra	ised by M	r. Normar	ı's Class			
Lottery	t.	5	5					
Candy Sale	5	5	5	5	5			
Bake Sale		5	5					
Car Wash	5	5	5	5	5	5	t t	

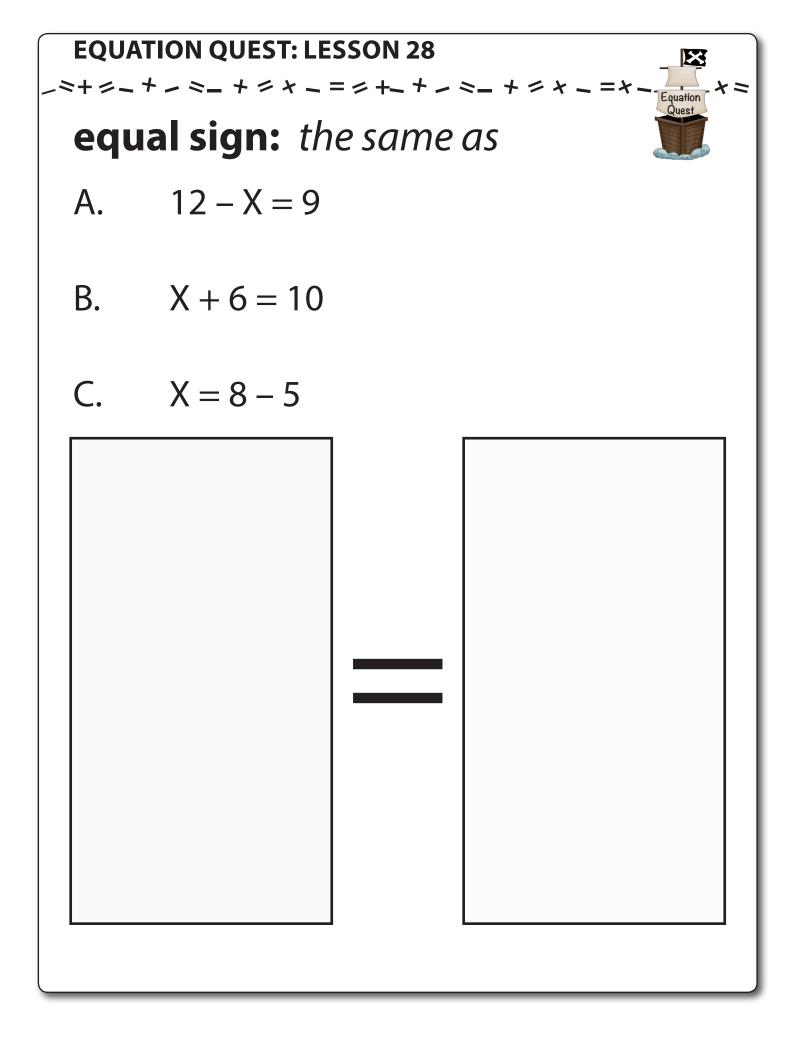


How much more money did Mr. Norman's class raise from the car wash than the bake sale?

B. Joe, April, and Molly counted 87 animals at the zoo. Joe counted 41 animals. April counted 22 animals. How many animals did Molly count?

C. Donnell went to the beach. He counted 12 pelicans and 34 crabs. How many fewer pelicans did Donnell count?



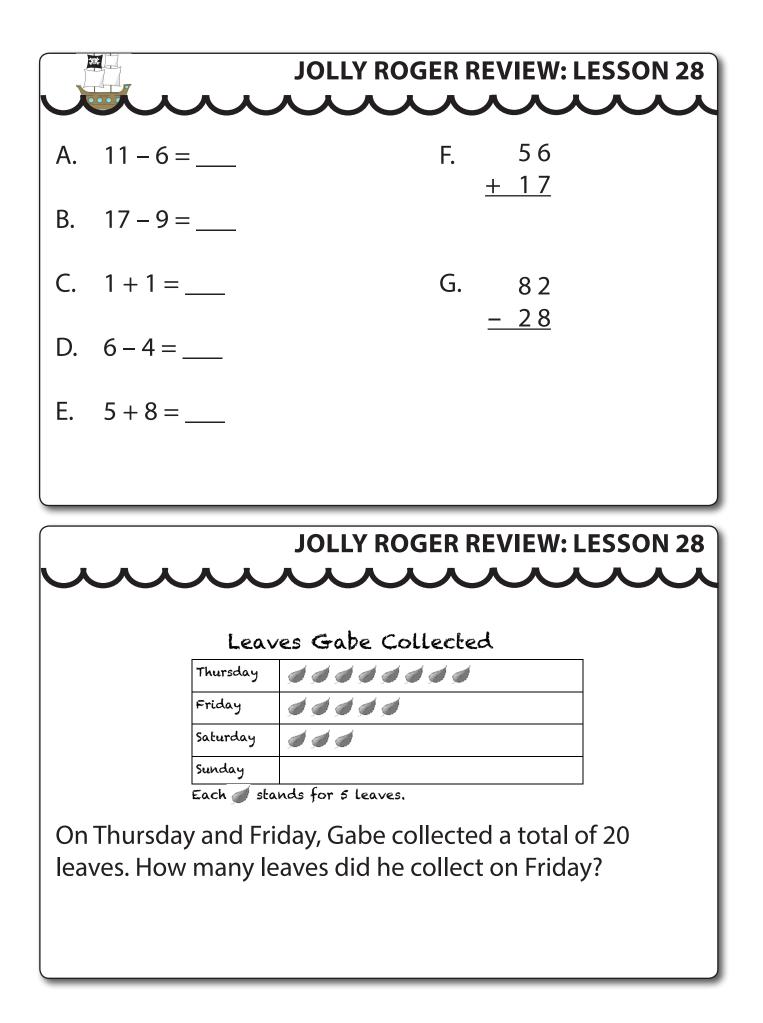


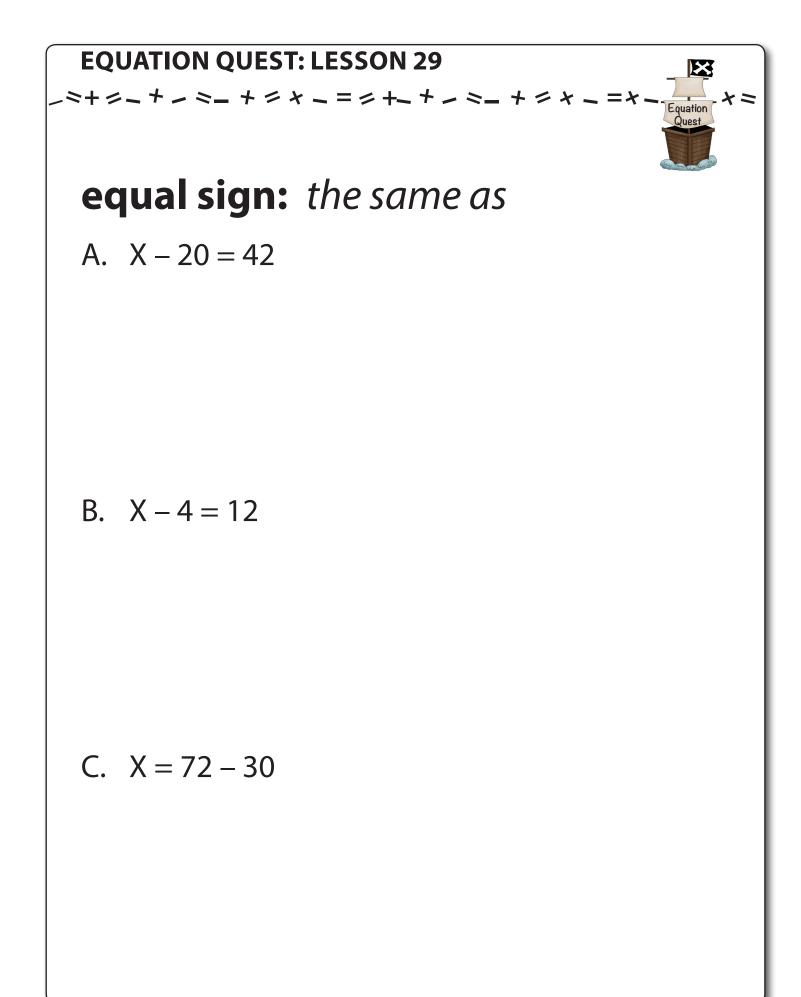
BUCCANEER PROBLEMS: LESSON 28 Park Visits 100 90 80 70 60 50 40 30 20 10 0 Ayesha Sophia Rebecca Ray

A. How many more Park visits did Rebecca make than Ray?

B. How many parks visits did Sophia and Ayesha make?

C. Larry read 32 fewer books than Kavon. If Kavon read 71 books, how many books did Larry read?

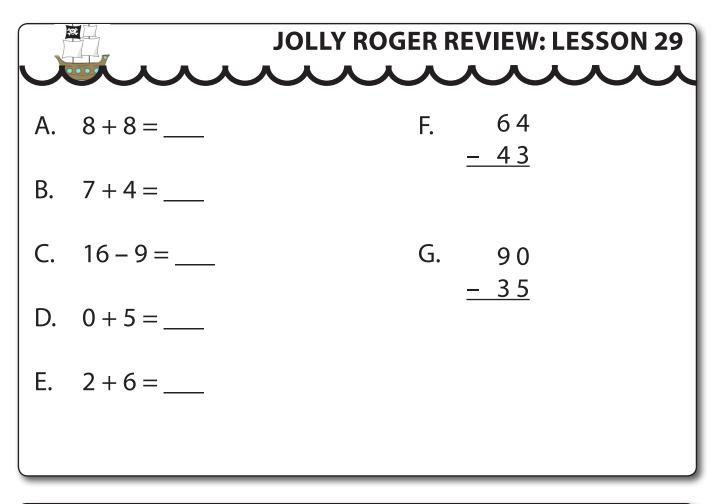


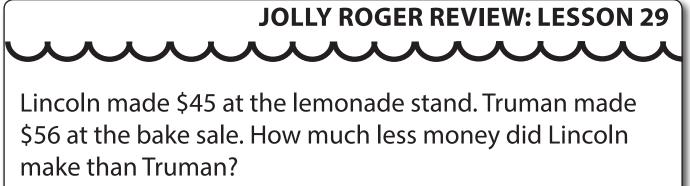


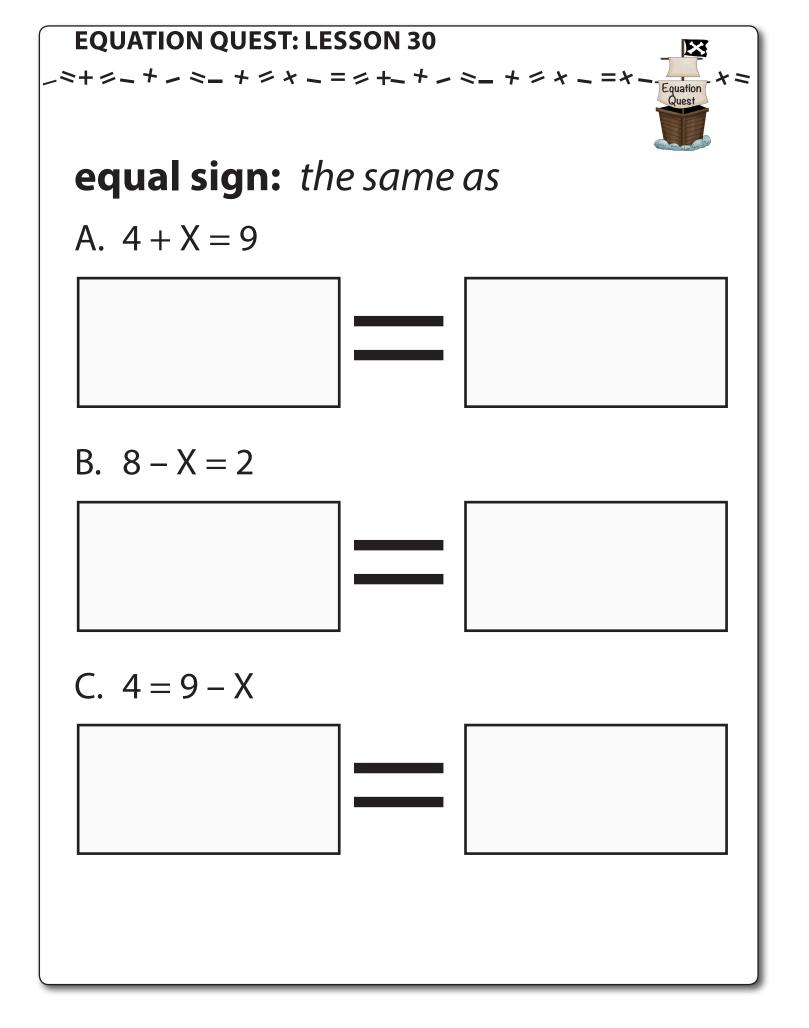
A. The band has 25 trumpet players, 12 tuba players, and 18 trombone players. How many more trumpet players than tuba players are in the band?

B. The band has 25 trumpet players, 12 tuba players, and 18 trombone players. How many fewer trombone players than trumpet players are in the band?

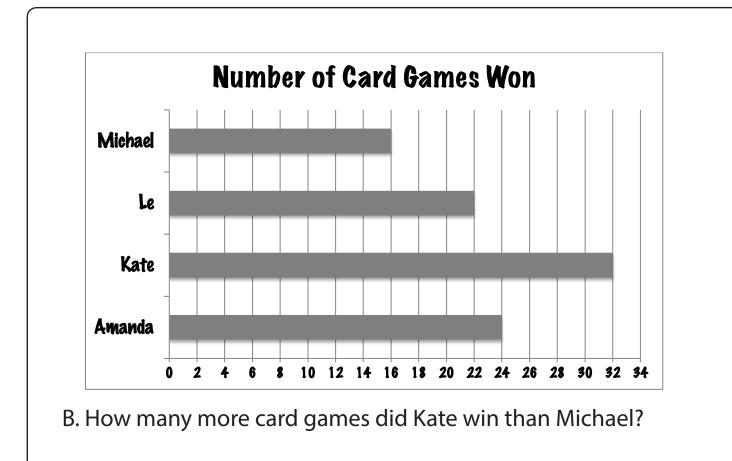
C. The band has 25 trumpet players, 12 tuba players, and 18 trombone players. What is the total number of trumpet and trombone players?



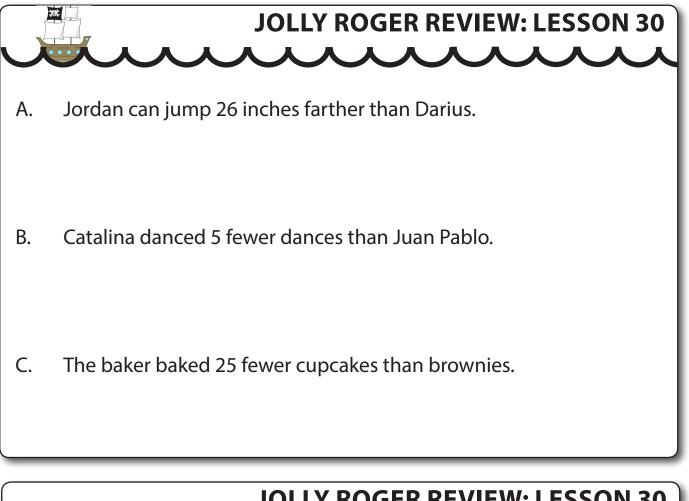


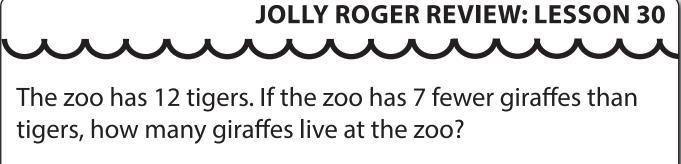


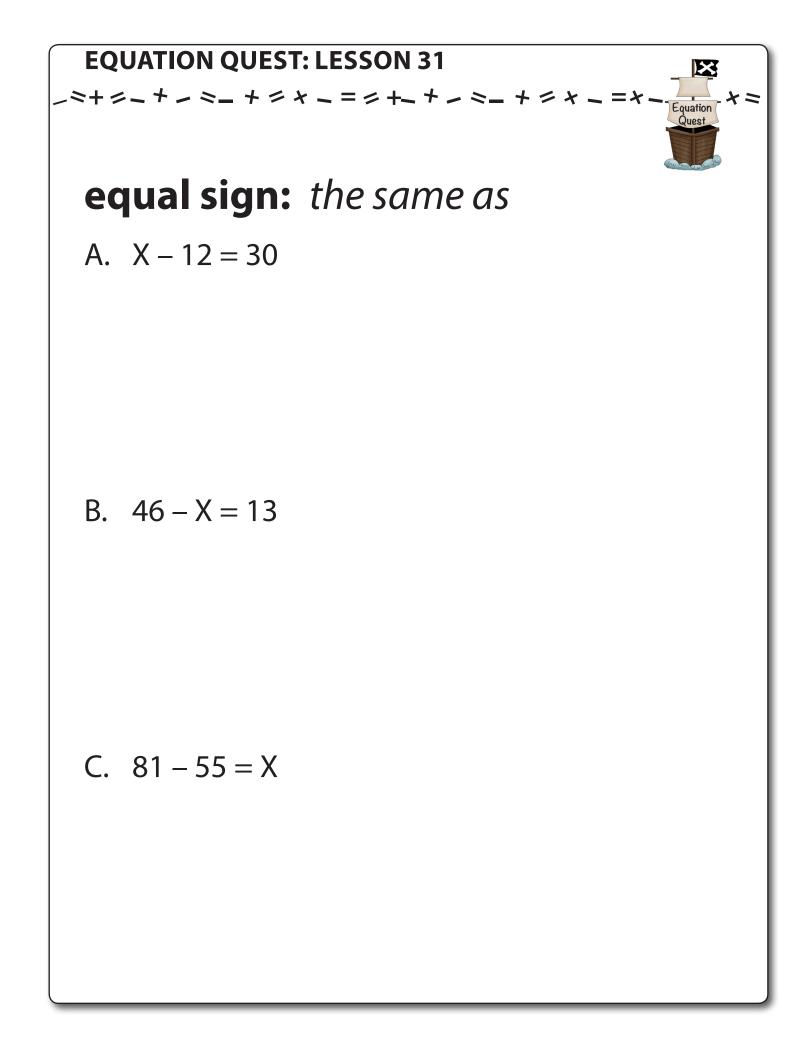
A. A squirrel collected 74 nuts. A chipmunk collected 14 fewer nuts than the squirrel. How many nuts did the chipmunk collect?



C. How many fewer card games did Le win than Amanda?





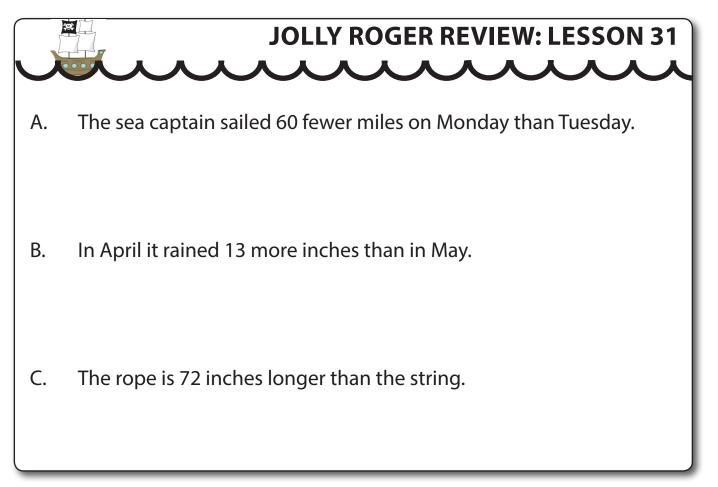


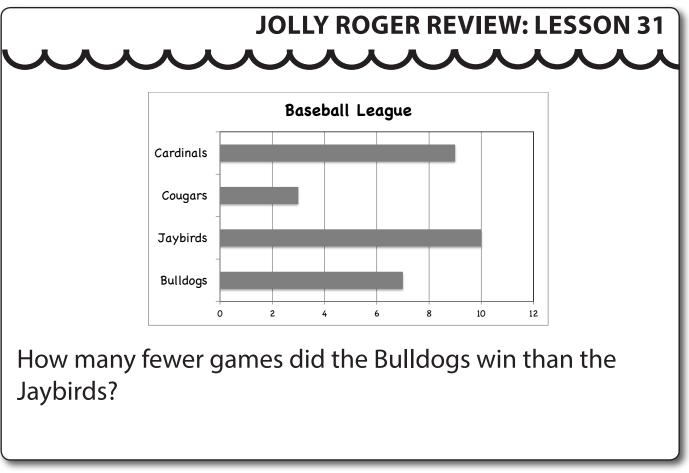


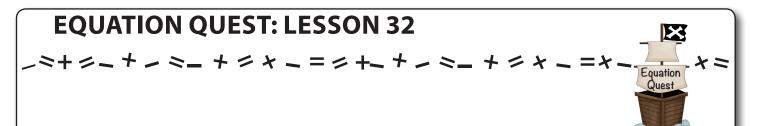
A. Diamond has visited 14 different states. Her dad has visited 29 more states than Diamond. How many states has Diamond's dad visited?

B. In the field, there were brown cows and white cows. Ty counted 17 white cows. If there were 26 more brown cows than white cows, how many brown cows were in the field?

C. On Saturday, Roman worked for 8 hours. He earned \$46. On Sunday, Roman earned \$58. How much did Roman earn on Saturday and Sunday?





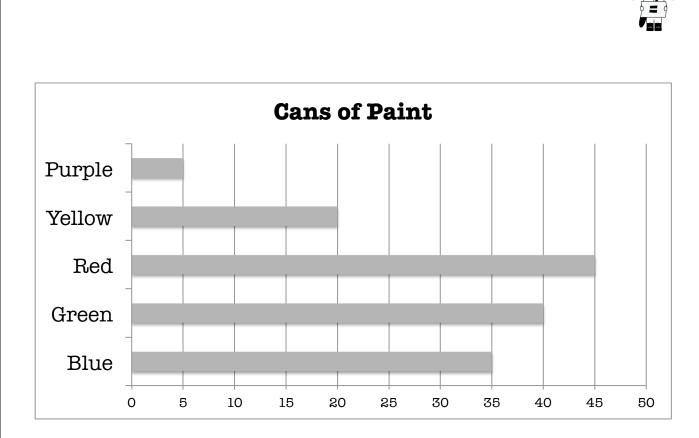


equal sign: the same as

A. 14 + X = 98

B. X = 17 - 9

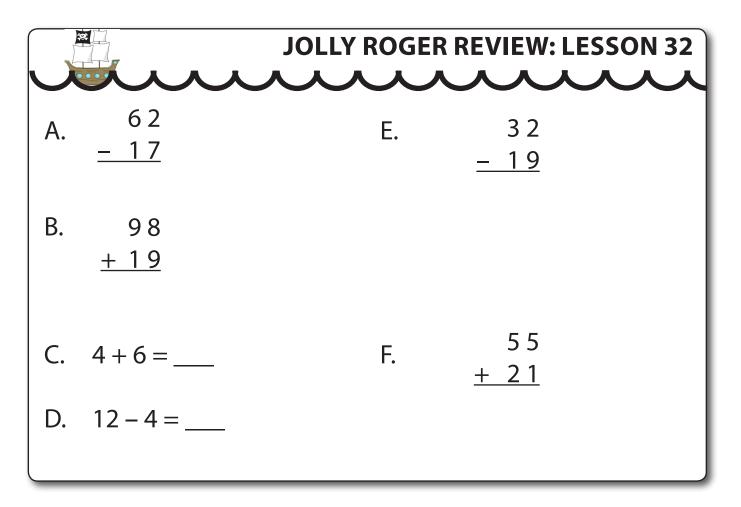
C. 10 + X = 44

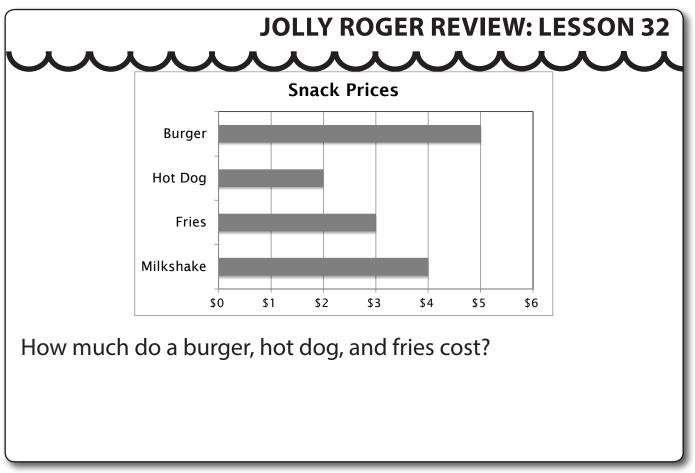


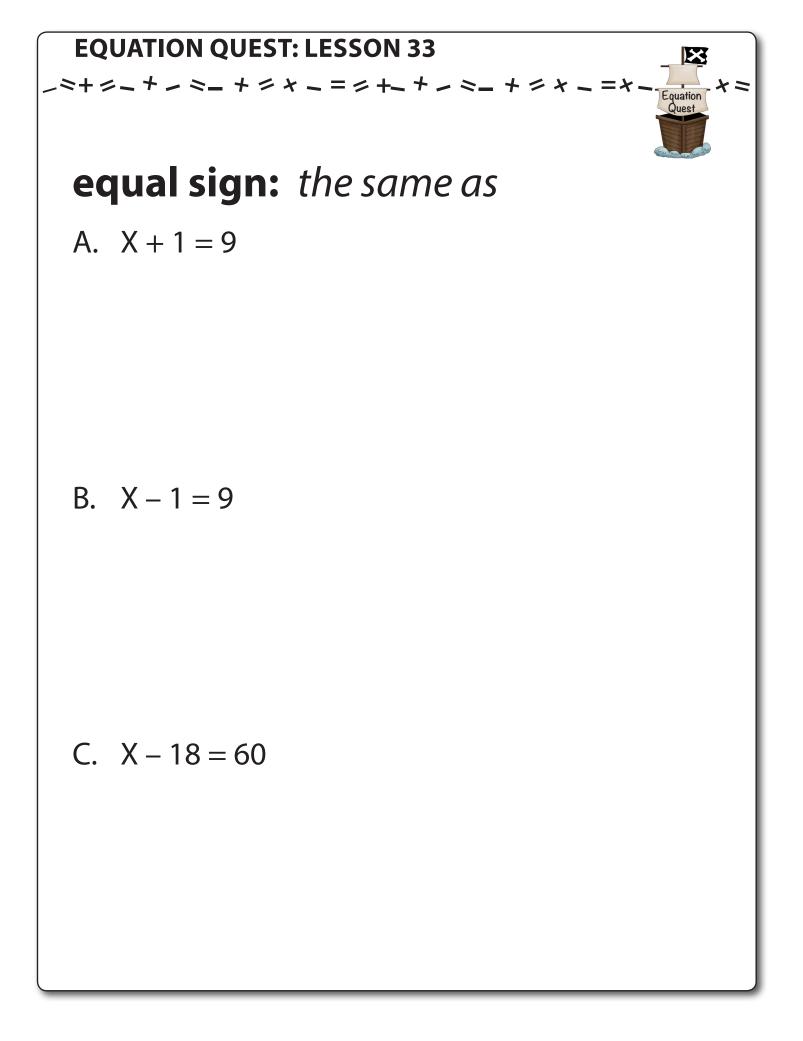
A. If the hardware store sells all of the purple, yellow, and blue cans of paint, how many cans of paint will the store sell?

B. Mateo went on a hike and collected red and yellow leaves. He collected 57 yellow leaves. If he collected 48 fewer red leaves, how many red leaves did Mateo collect?

C. Mateo went on another hike and collected orange and brown leaves. This hike lasted 2 hours. If he collected 27 orange leaves and 27 brown leaves, how many leaves did he collect?



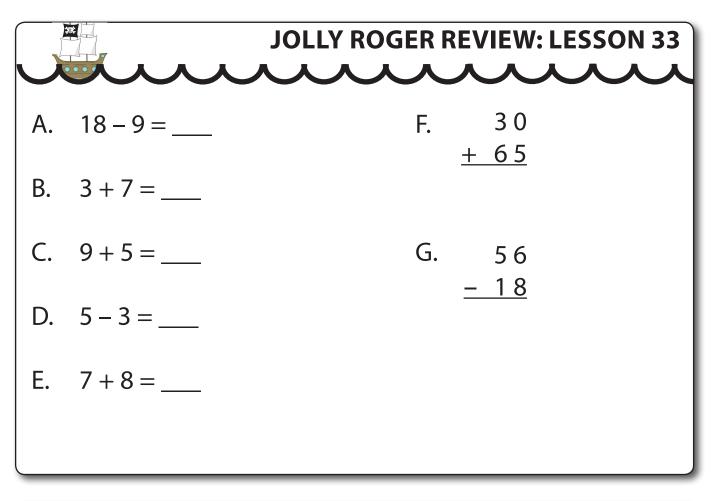




A. Vanessa spent a total of \$97 at the mall. She bought a purse and a pair of shoes. If the pair of shoes costs \$42, how much did the purse cost?

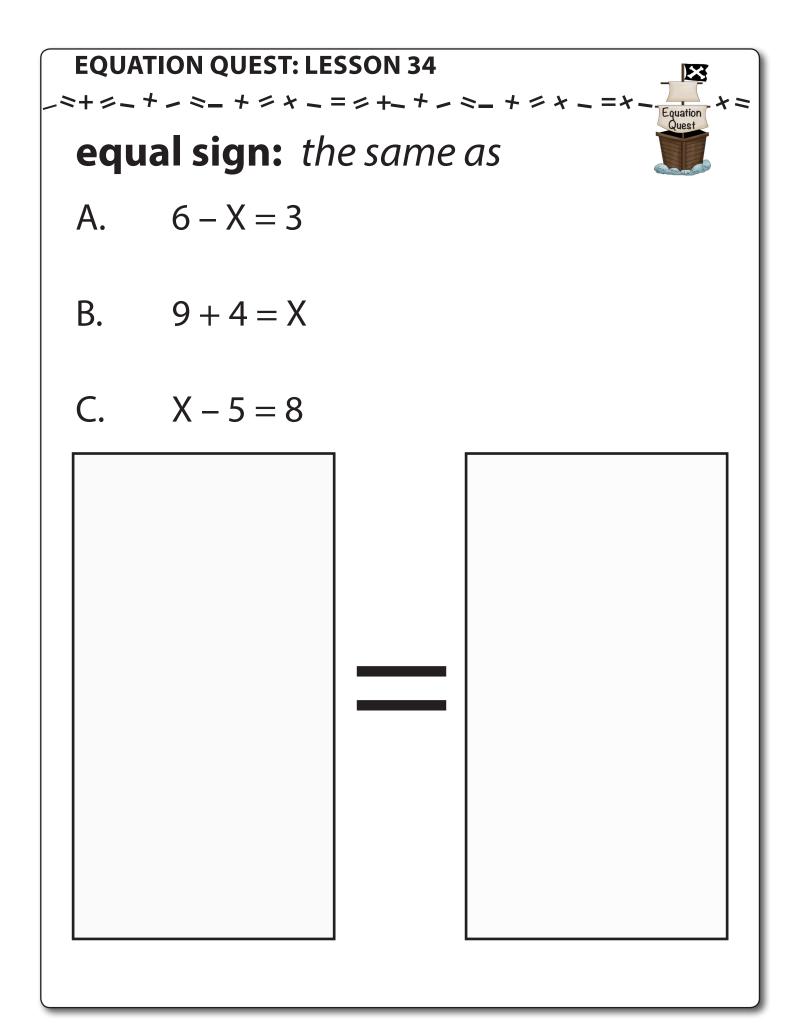
B. Malik has 35 more baseball cards than Jayden. Jayden has 22 baseball cards. Both boys have collected baseball cards for 3 years. How many baseball cards does Malik have?

C. Caleb went to the store and spent \$65. Trinity went to the store and spent \$29. How much less money did Trinity spend than Caleb?

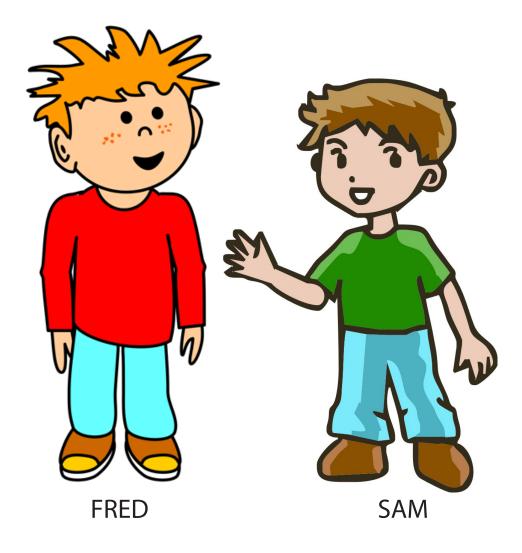




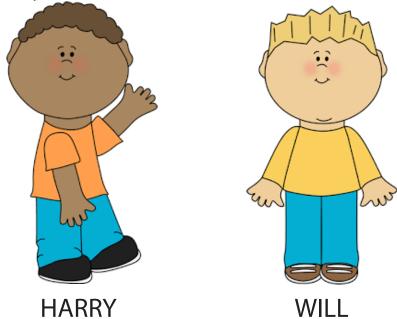
The apple orchard sold 45 fewer peaches than apples. If the orchard sold 36 peaches, how many apples did the orchard sell?



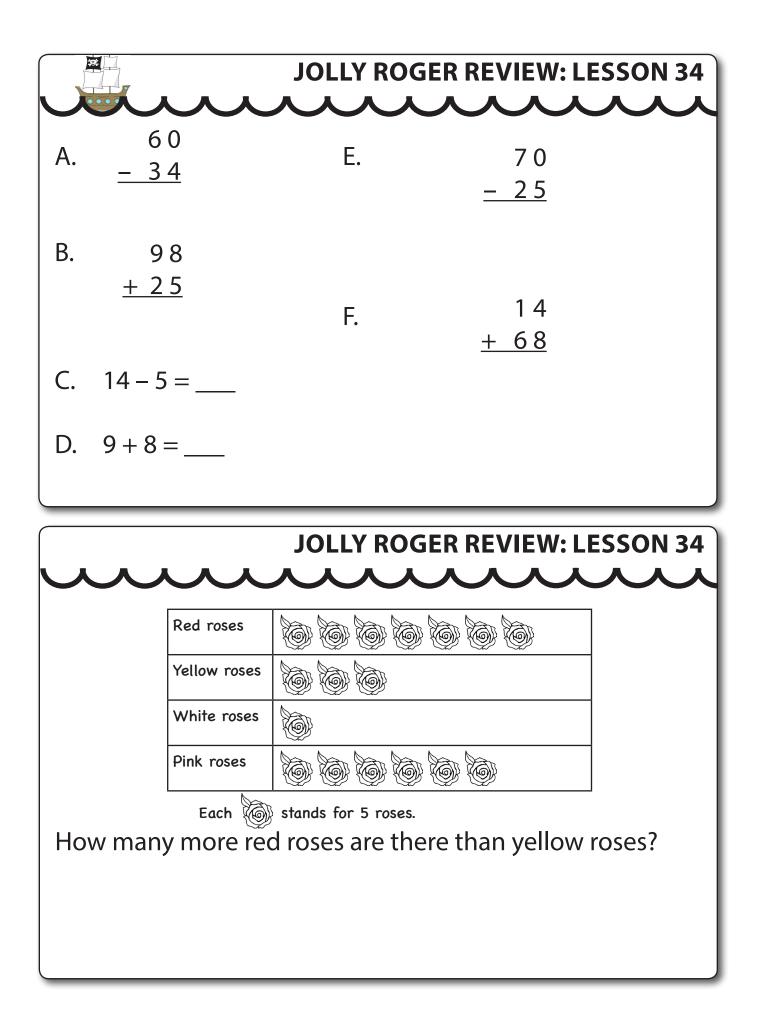
A. Fred had 2 crayons. Then, his friend Sam gave him 5 more crayons. Now, Fred has 7 crayons.

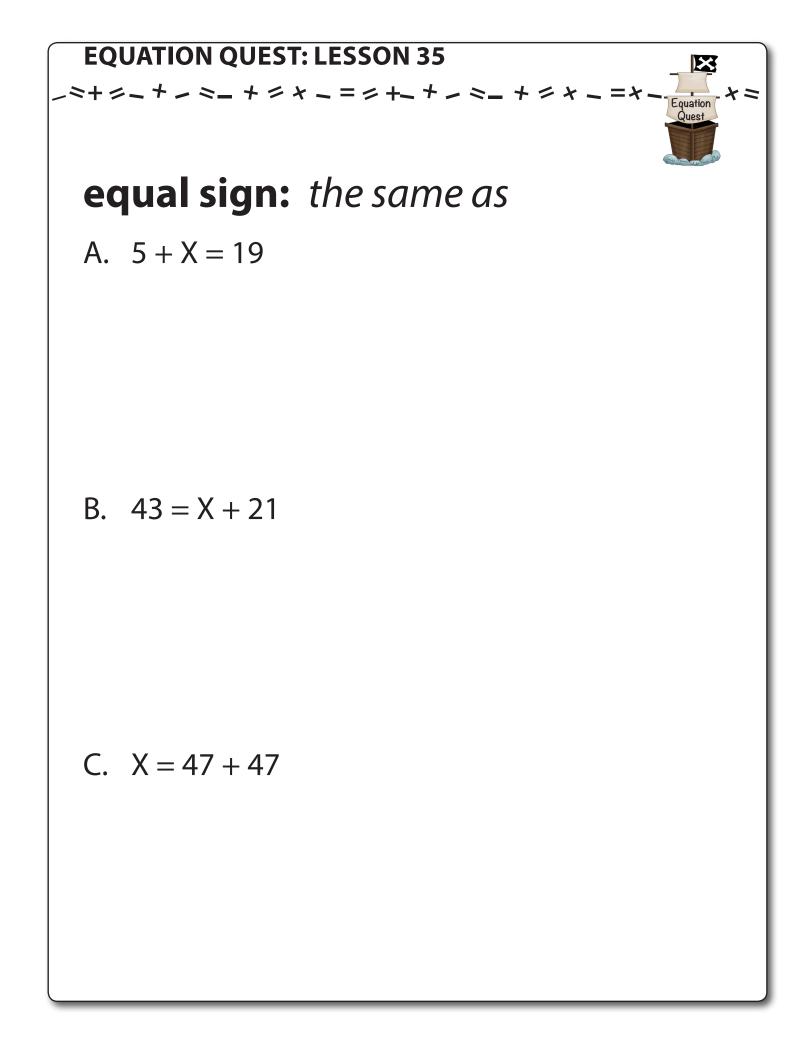


B. Harry had 9 crayons. Then, he gave 3 crayons to Will. Now, Harry has 6 crayons.



C. There were 9 apples on the apple tree. Then, 5 apples fell off. How many apples are on the tree now?

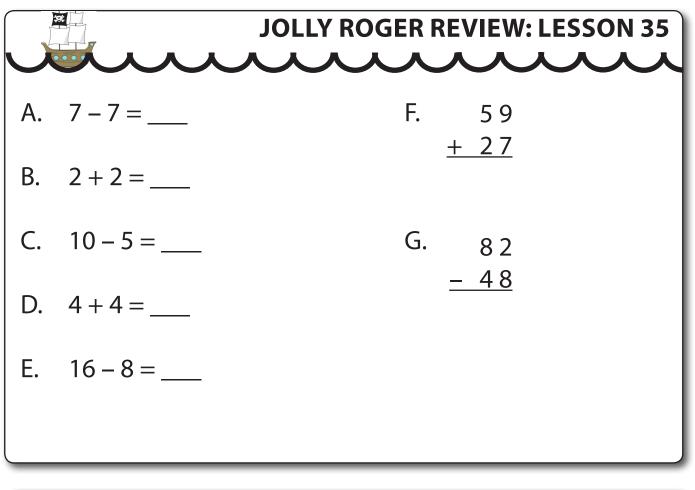


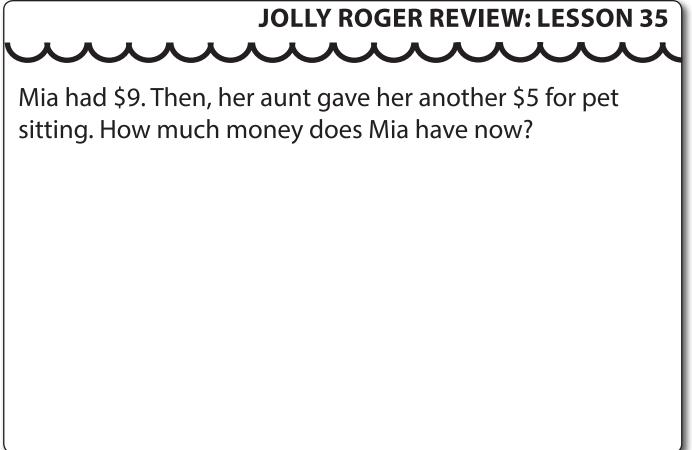


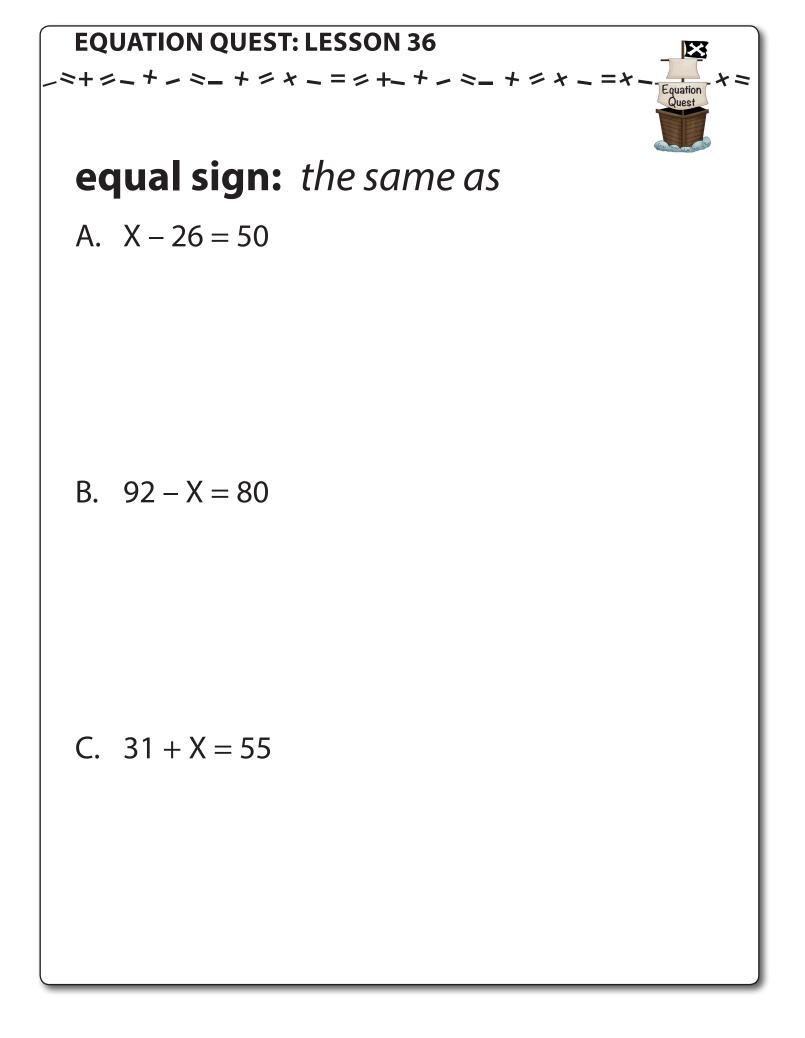
A. Will had 4 pennies. Later that day, he found 5 more pennies. How many pennies does Will have now?

B. Jayda had 7 lollipops. Then, she gave 3 lollipops to Lexie. How many lollipops does she have now?

- C. Will had more pennies than Stan.
- D. Chris had 6 more trains than Bill.
- E. Bill gave 6 more trains to Chris.
- F. Jackson ate 7 more candy bars than Rebecca.
- G. Rebecca gave Jackson 7 more candy bars.
- H. Richard gave Jean 4 more toy cars.
- I. Jean had 4 more toy cars than Richard.







A. 5 more cats than dogs.

B. 5 more girls than boys.

C. Molly had 4 daisies. Then, her mom gave her 3 more daisies. How many daisies does Molly have now?

More Sentences

D. Brody has 7 more books than video games.

Then, Andrew bought 5 more baseball cards.

E. Then, Ashley's friend gave her 6 more shirts.

Nancy watched 7 more movies than Megan.

F. Then, Katie got 2 more dolls for her birthday.

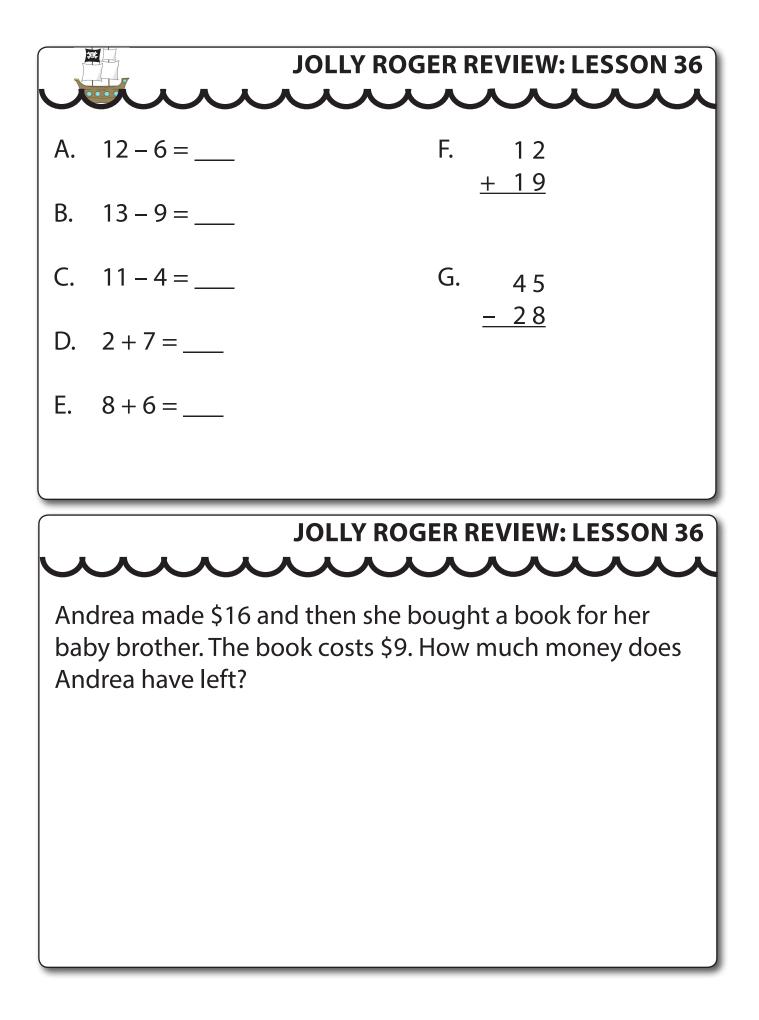
Sally grew 5 more flowers than Mark.

G. Then, Jane's dad gave her 5 more coins.

Regan walked 4 more miles than Bethany.

H. Molly had 12 daisies. Then, she gave some to her mom for Mother's Day. Now, Molly has 4 left. How many daisies did Molly give to her mom?

I. The store had 30 t-shirts. The next day a truck brought more t-shirts. Now, there are 50 t-shirts. How many t-shirts did the truck bring?

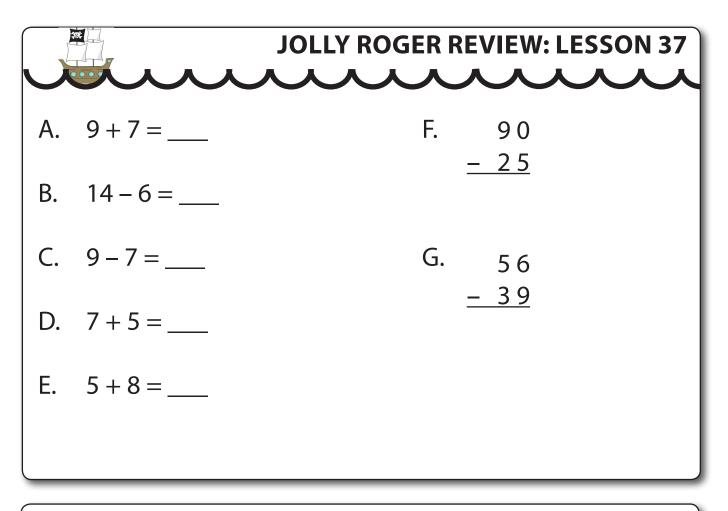


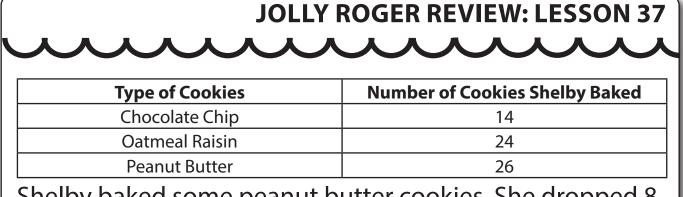


A. There were 5 kids in the art room. After lunch, more kids came to the art room. Now there are 8 kids in the art room. How many more kids came?

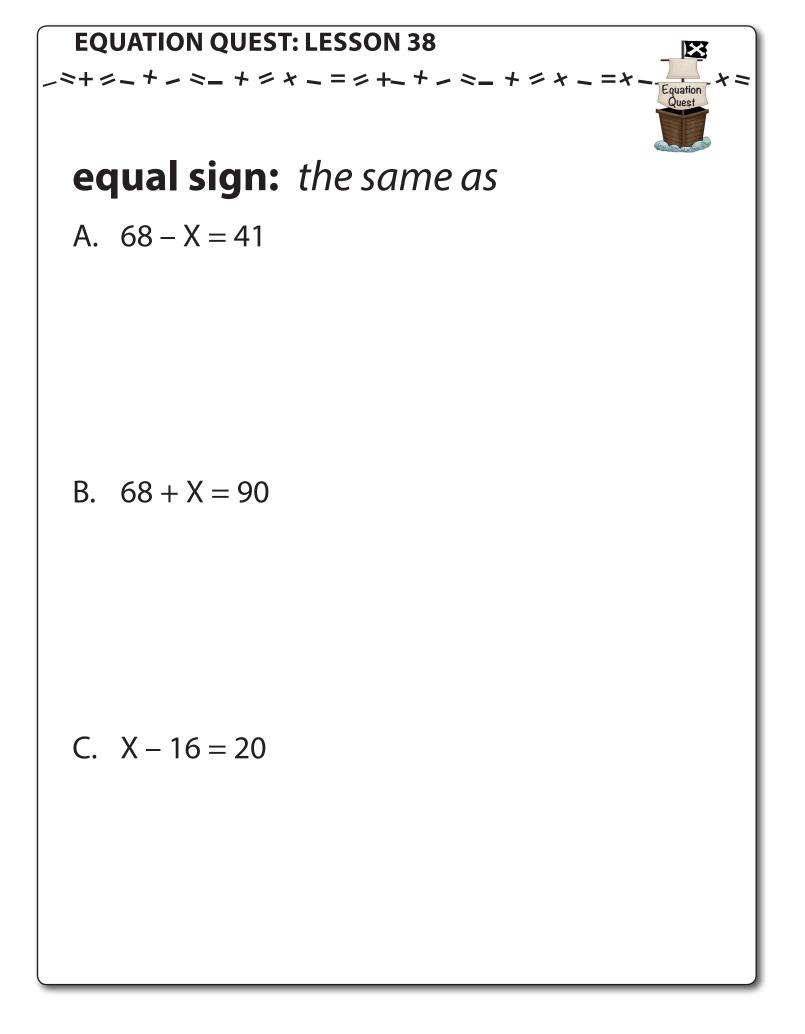
B. Paul has a fish tank with 5 crabs. He put 3 plants in the fish tank. Then, he put some more crabs in the tank. Now there are 9 crabs. How many crabs did Paul put in the tank?

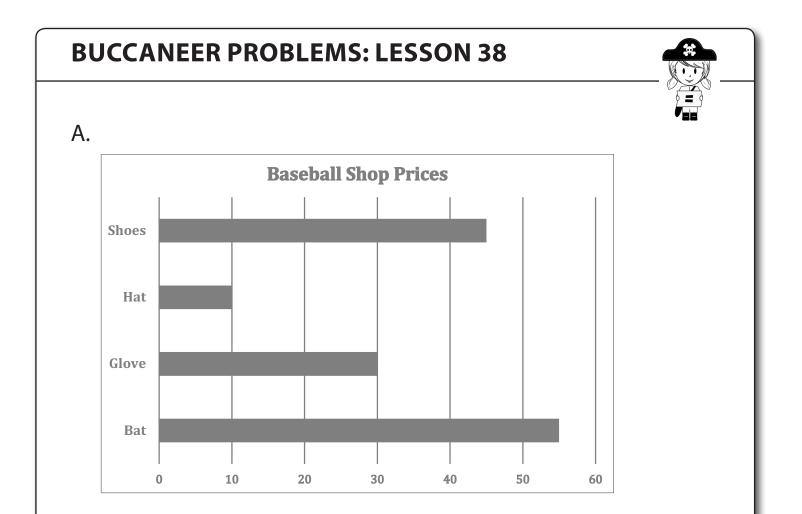
C. Ted had 5 library books. After school, he returned 2 books and checked out 4 movies. How many books does Ted have now?





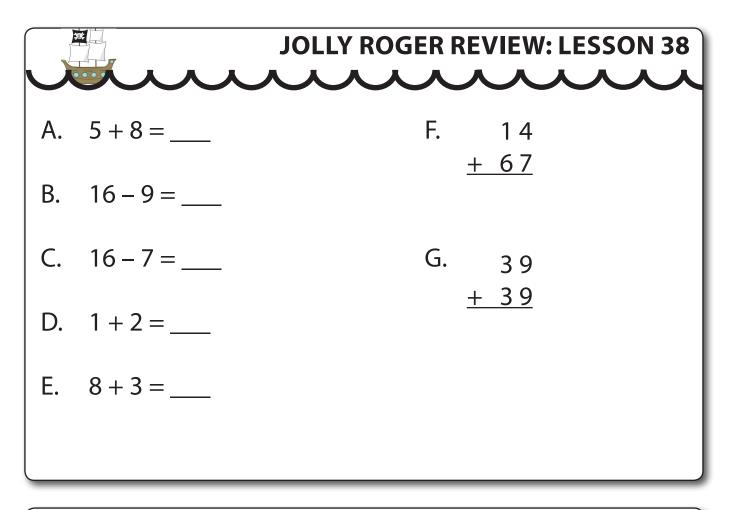
Shelby baked some peanut butter cookies. She dropped 8 of them while walking to the bake sale. How many peanut butter cookies does Shelby have left?





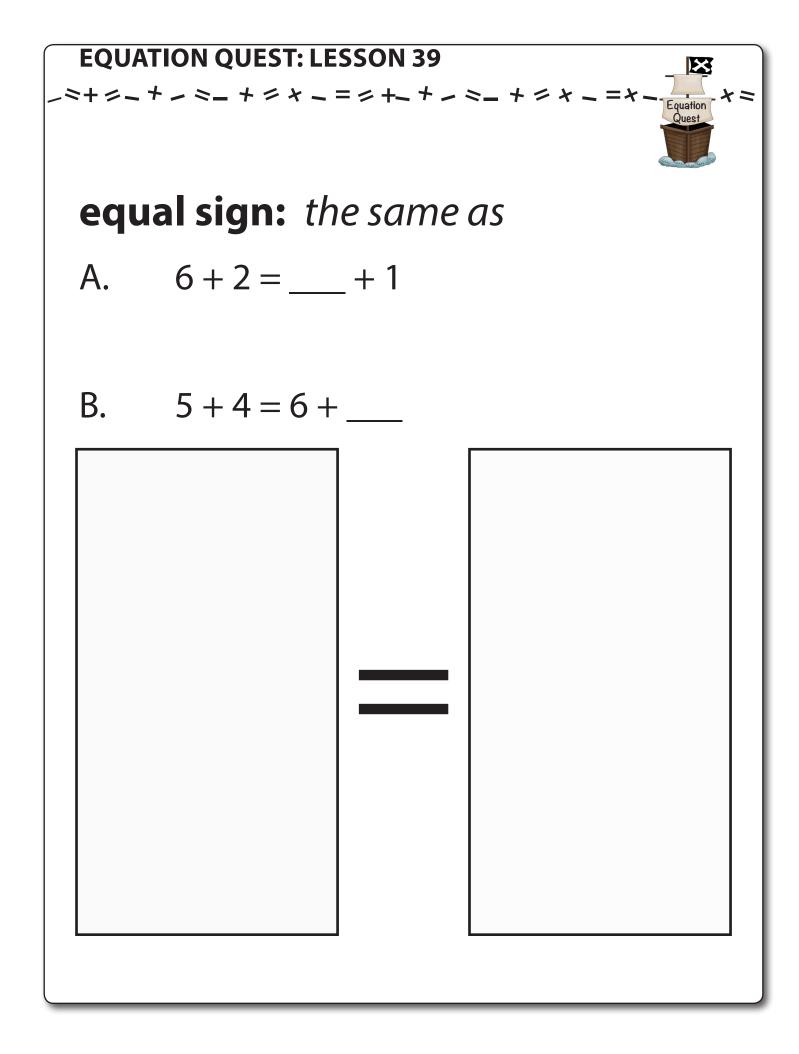
Kelly bought shoes. Now she has \$97. How much money did Kelly have to start with? B. Mason went to the pool 5 times this week. In the morning, he swam some laps. Then, he swam 10 more laps. Altogether, he swam 30 laps. How many laps did he swim in the morning?

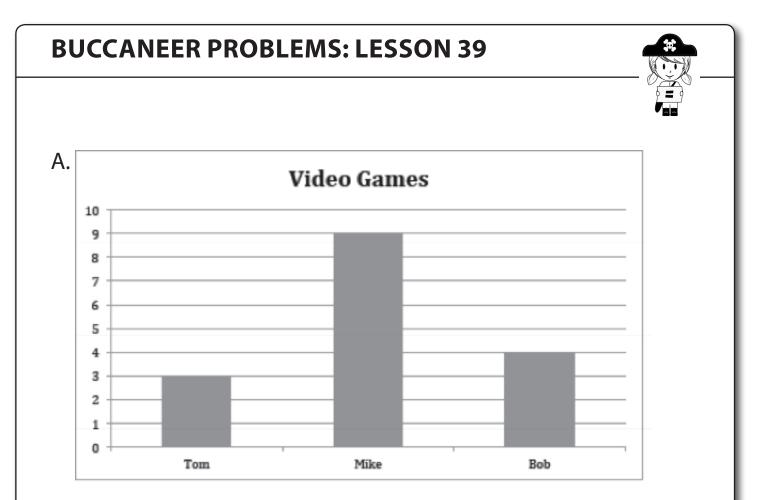
C. Lena earned some money raking leaves. Then, she spent \$3 at the candy store and has \$5 left. How much money did Lena have to start with?



JOLLY ROGER REVIEW: LESSON 38

Bruno colored 16 pages in his coloring book. Then, he colored 9 more pages. The book had 90 pages. How many pages has Bruno colored?

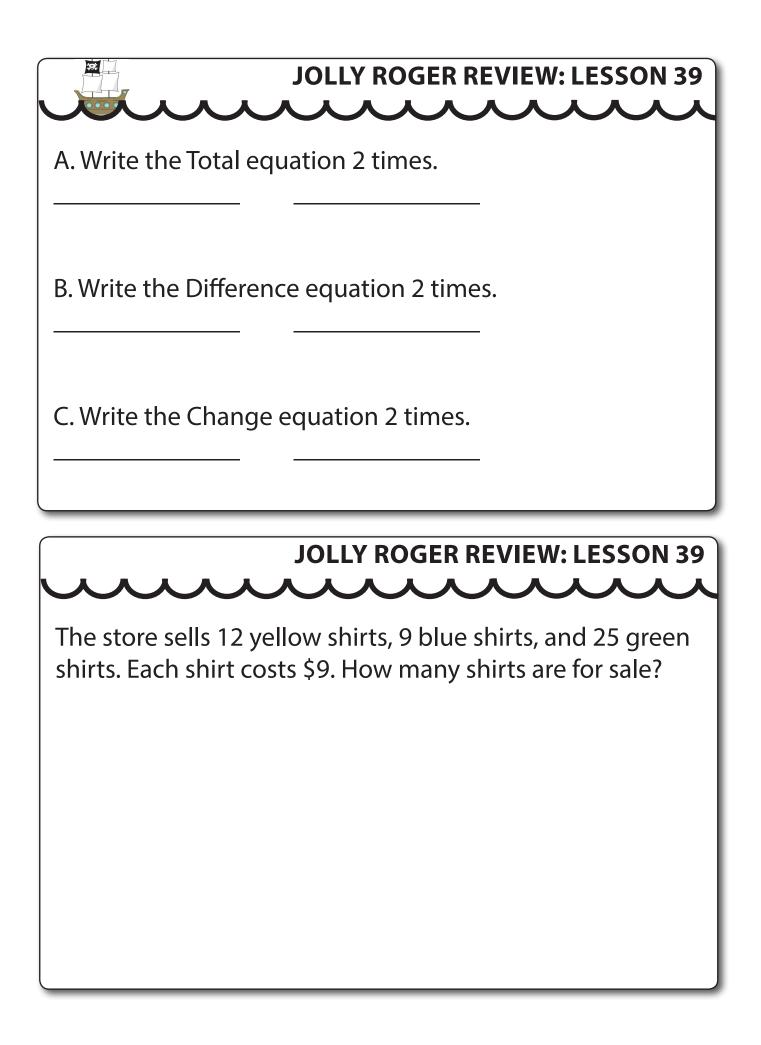


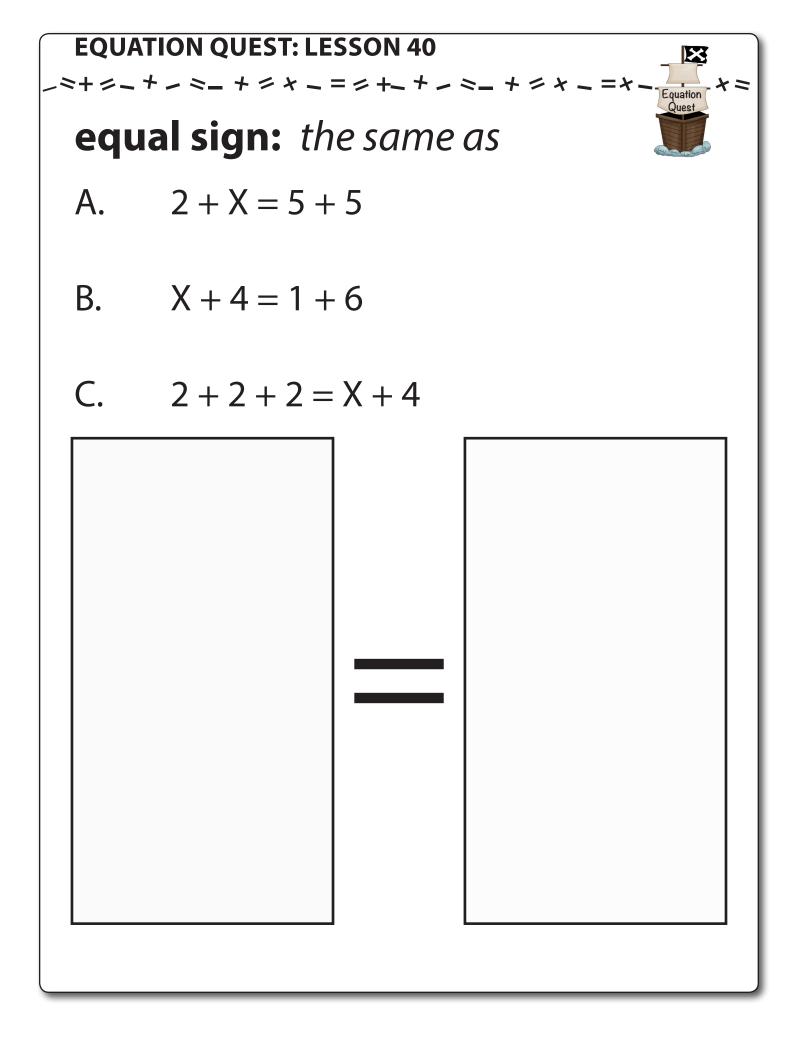


Mike played video games in the morning. Later that day, he played 15 sports games. How many games has Mike played now?

B. There were some puppies at the pet store. A family came to the pet store and bought 1 puppy. Now, there are 4 puppies left. How many puppies were at the pet store to start with?

C. Bess had a party. She invited 2 fewer boys than girls to the party. She invited 15 boys. How many girls did she invite?

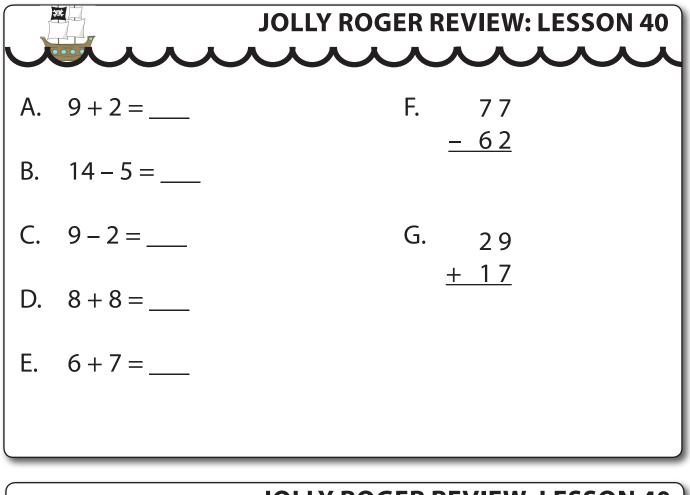


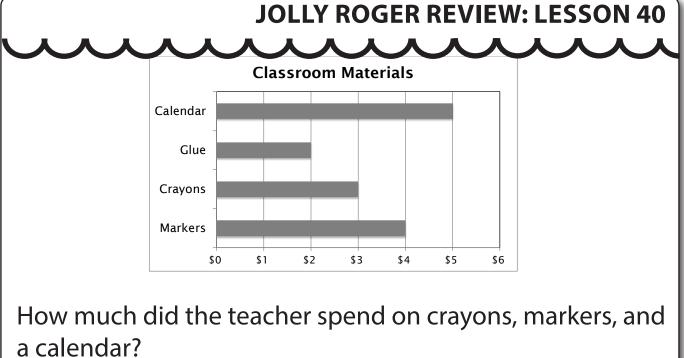


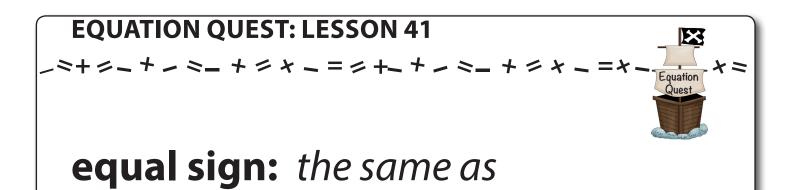
A. Malik had 2 peppers. Then, he bought 3 peppers at the store, and his friend gave him 4 peppers from his garden. How many peppers does Malik have now?

B. Min had \$6. On Saturday, she earned \$4 for doing chores. Then, she spent \$7 at the movies. How much money does Min have left?

C. Gina spent \$34 at the post office. She spent \$19 to mail packages. Gina spent the rest on stamps. How much did Gina spend on stamps?







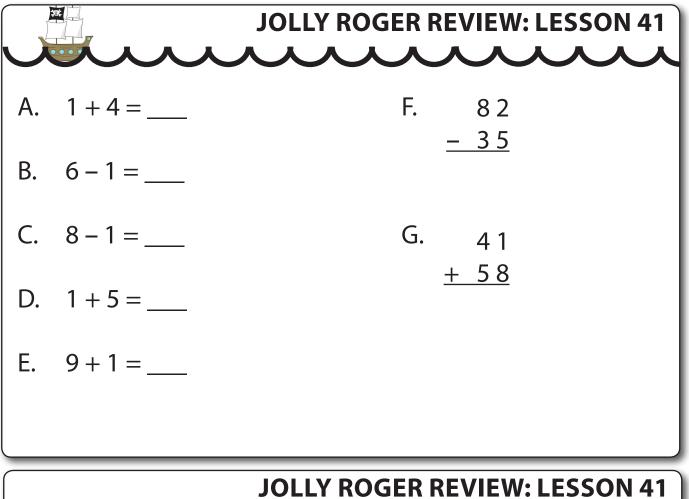
A. 3 + 6 = X + 4

B. 10 + 20 = 14 + X

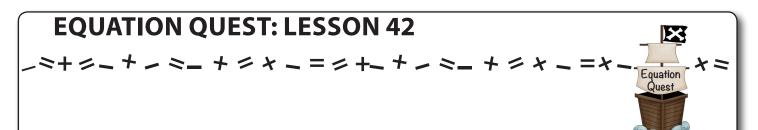
C. X - 5 = 13

A. Dan had \$6 in his piggy bank. Then, he got \$5 from the tooth fairy. He also earned \$10 mowing lawns. How much money is in his piggy bank now?

B. Jean ate 5 strawberries. Her dad gave her some more strawberries. She ate 8 strawberries in all. How many strawberries did her dad give her? C. Thomas had 24 M&Ms and 12 Skittles. At lunch, Thomas ate some M&Ms. If he has 6 M&Ms left, how many did he eat?



Paula has 22 race cars. She lost 5 race cars. Then, her friend Daniela gave her 42 more. How many race cars does Paula have now?



equal sign: the same as

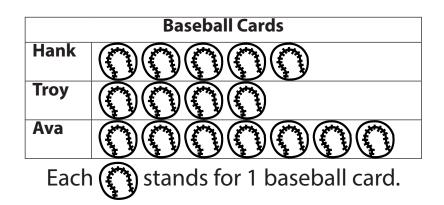
A. X - 2 = 4 + 3

B. 8 - X = 10 - 7

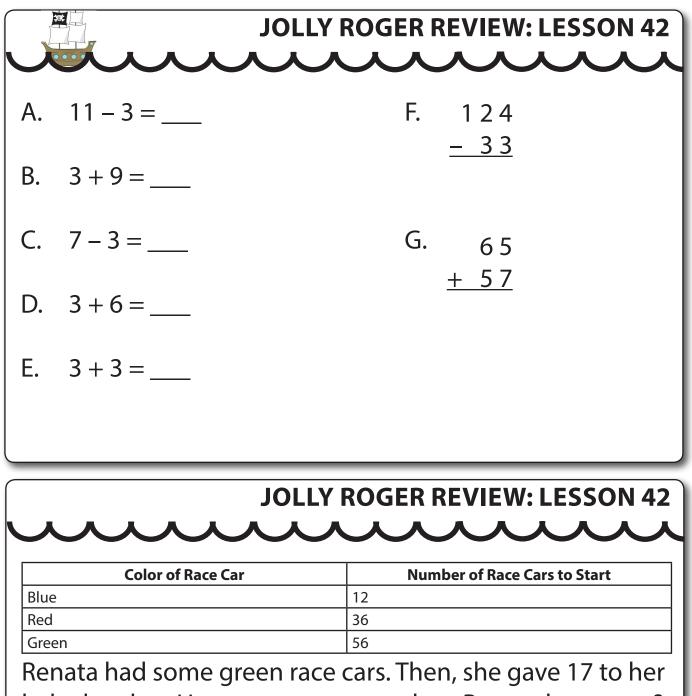
C. 6 - X = 3

A. Carl bought 7 hot dogs before the baseball game. Then, he bought 4 more hot dogs and 8 baskets of french fries during the game. After the game he bought 3 more hot dogs. How many hot dogs did Carl buy?

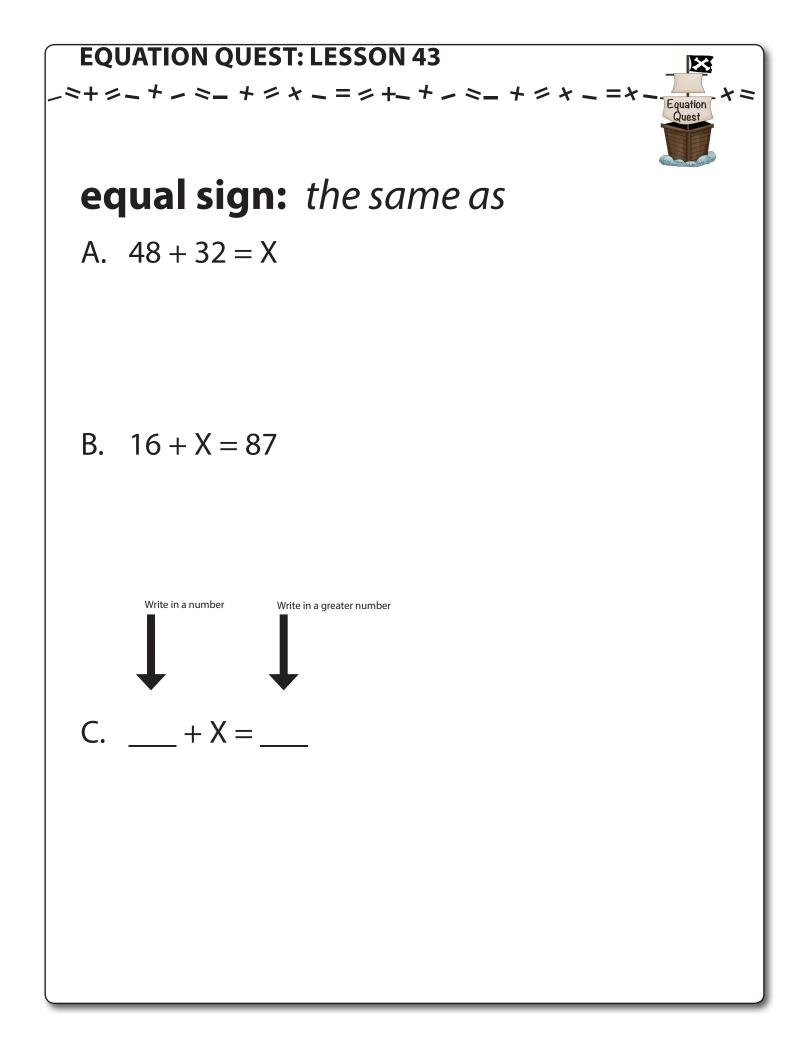
Β.



The graph shows how many baseball cards Hank had on Monday. Greg gave him 19 more cards on Tuesday. How many baseball cards does Hank have now? C. Kara had some money in her piggy bank. For her birthday she got \$15 and 3 games. Now, she has \$32 in her piggy bank. How much money did Kara have to start with?



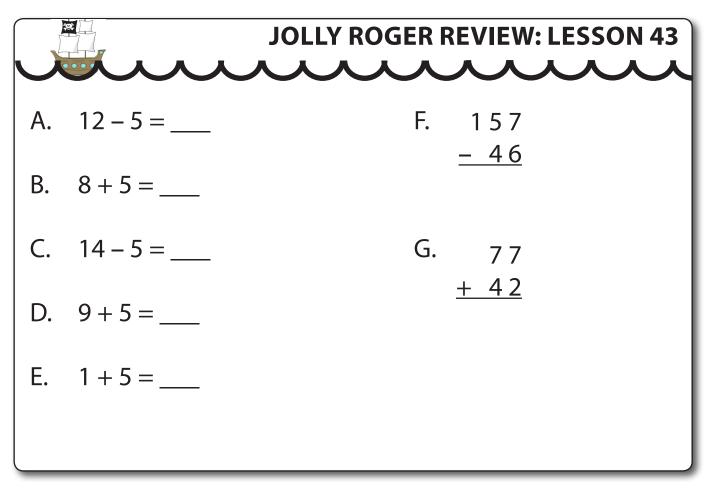
baby brother. How many race cars does Renata have now?



A. Jen has 9 cookies. Carol has 4 more cookies than Jen. How many cookies does Carol have?

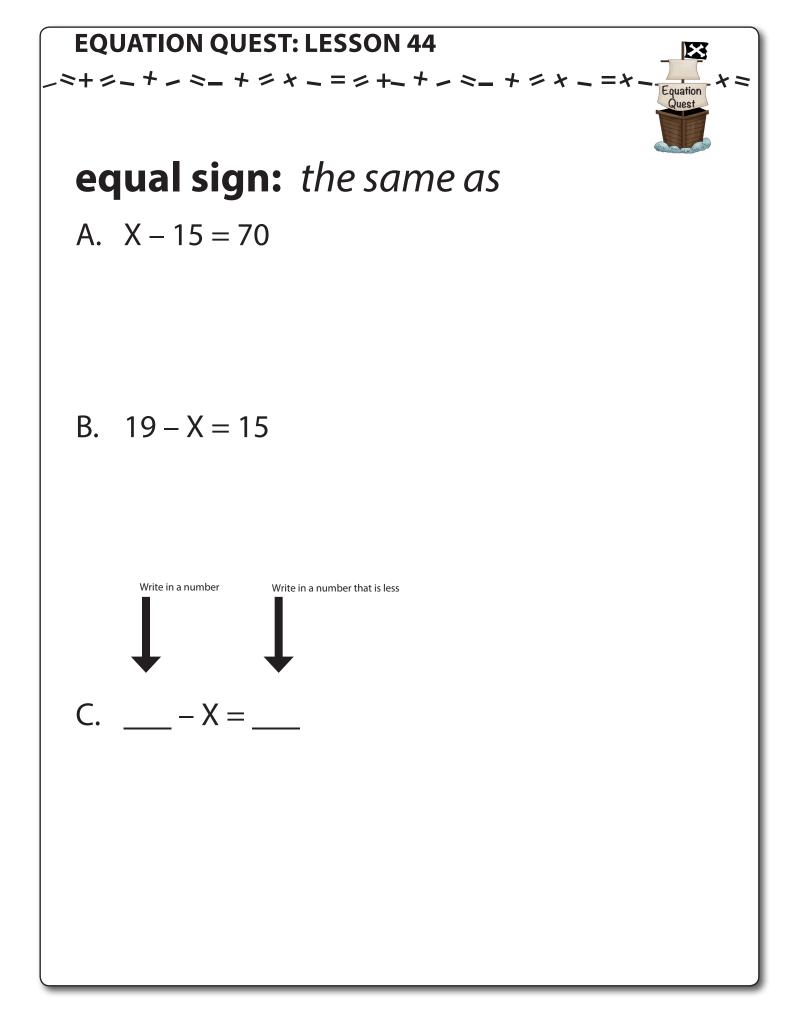
B. Carol has 43 cookies. She dropped 26 on the floor. How many cookies does she have now?

C. There are 15 chocolate and oatmeal cookies in the cookie jar. If there are 10 chocolate cookies, how many oatmeal cookies are there?





Felicia and Zach made 49 cookies for the class party. Before they brought the cookies to school, they ate 11 of the cookies. On the way to school, they dropped 6 cookies. How many cookies did Felicia and Zach bring to school?



A. Mr. Harris has \$45. He spent \$22 at the bookstore and \$13 at the post office. How much money did he spend?

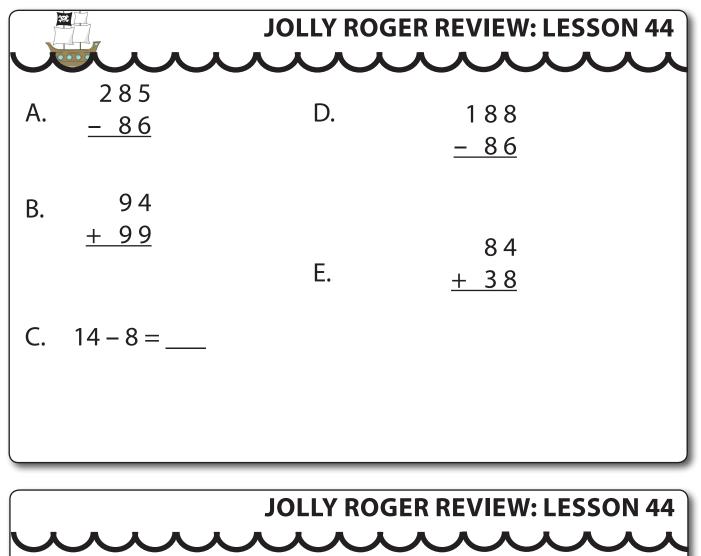
Β.

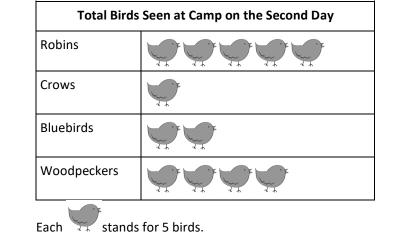
Costs at Ice Cream Shop			
Ice Cream Cone	\$		
Banana Split	\$ \$ \$ \$ \$ \$		
Root Beer Float	?		
Hot Fudge Cake	\$ \$ \$ \$ \$		

Each 😂 stands for \$1.

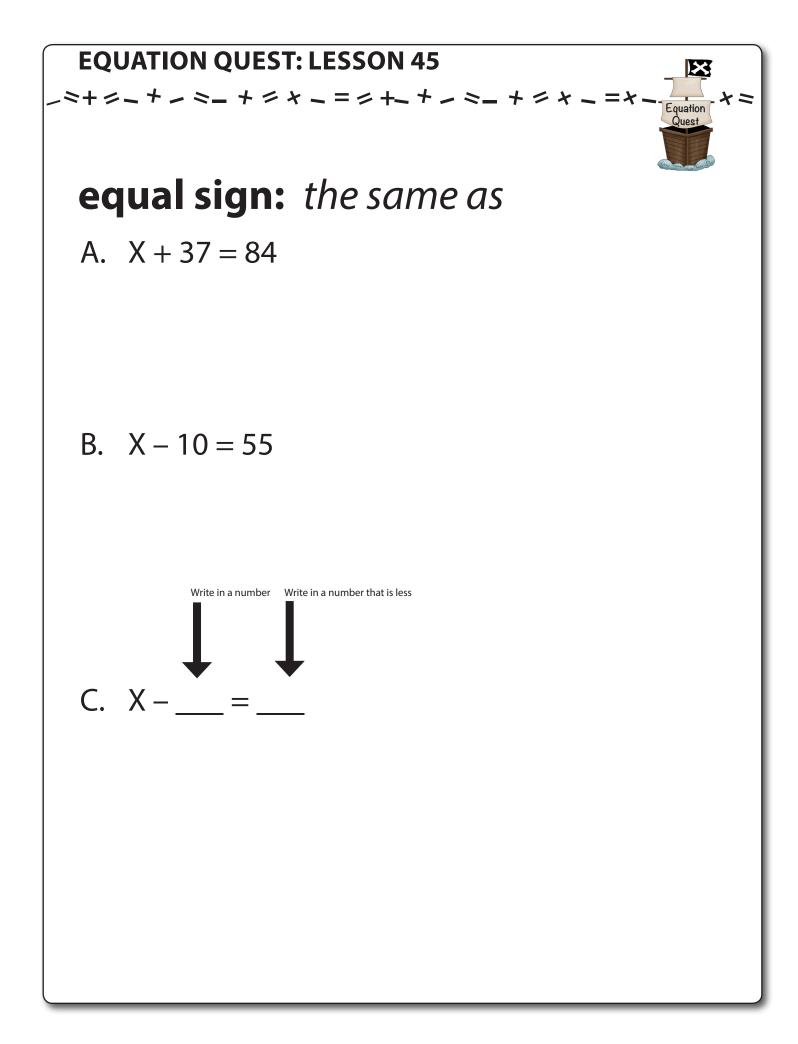
A banana split costs \$4 more than a root beer float. How much money does a root beer float cost?

C. Juan spent \$3 at the candy store. He bought 38 pieces of candy. Then he gave some to his sister. Now, he has 22 pieces of candy. How many pieces of candy did he give away?





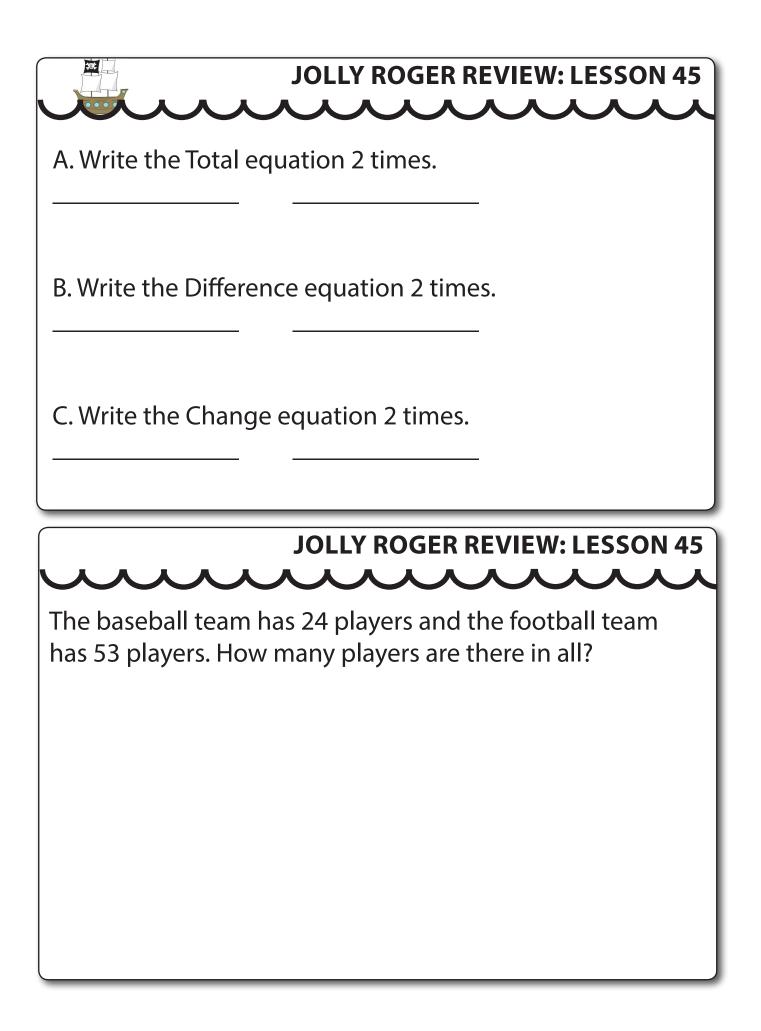
On the first day of camp, campers saw 10 crows. On the second day, they saw some more. How many crows did the campers see on the first and second days?

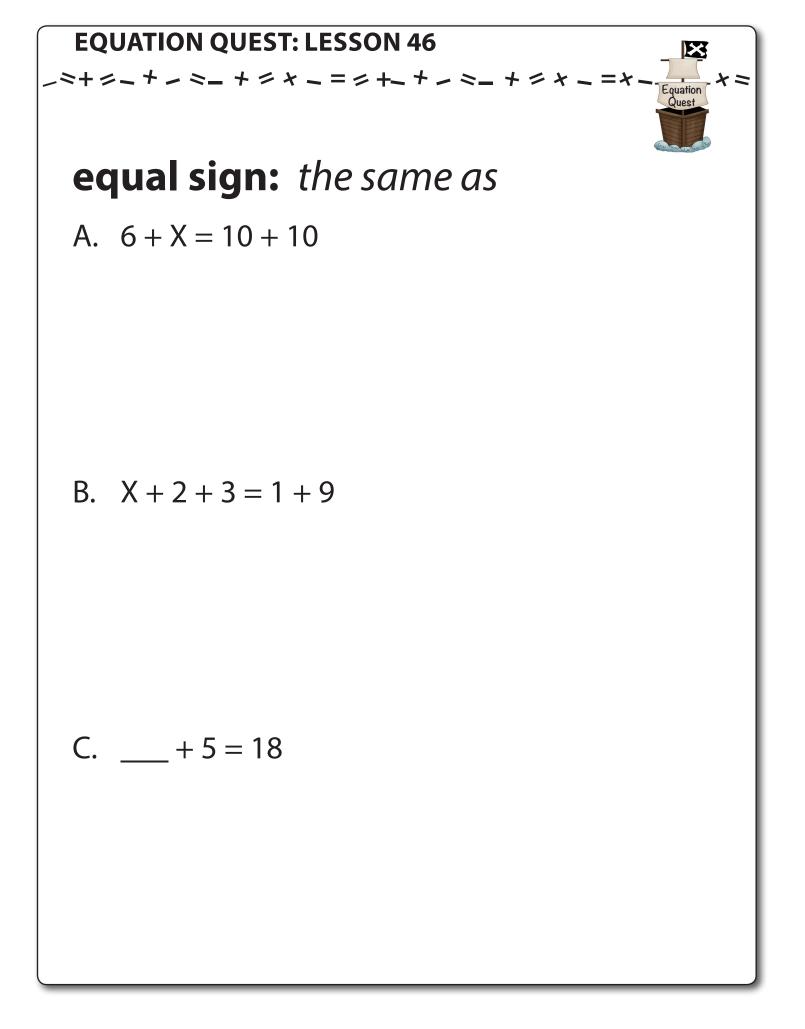


A. There are 13 more horses than pigs at the farm. If there are 25 horses, how many pigs are there?

B. The horses and pigs ate 44 apples. If the horses ate 32 apples, how many apples did the pigs eat?

C. There were 7 pigs playing in the mud. Later that afternoon, 4 more pigs started playing in the mud. 5 horses watched the pigs. How many pigs are playing in the mud now?

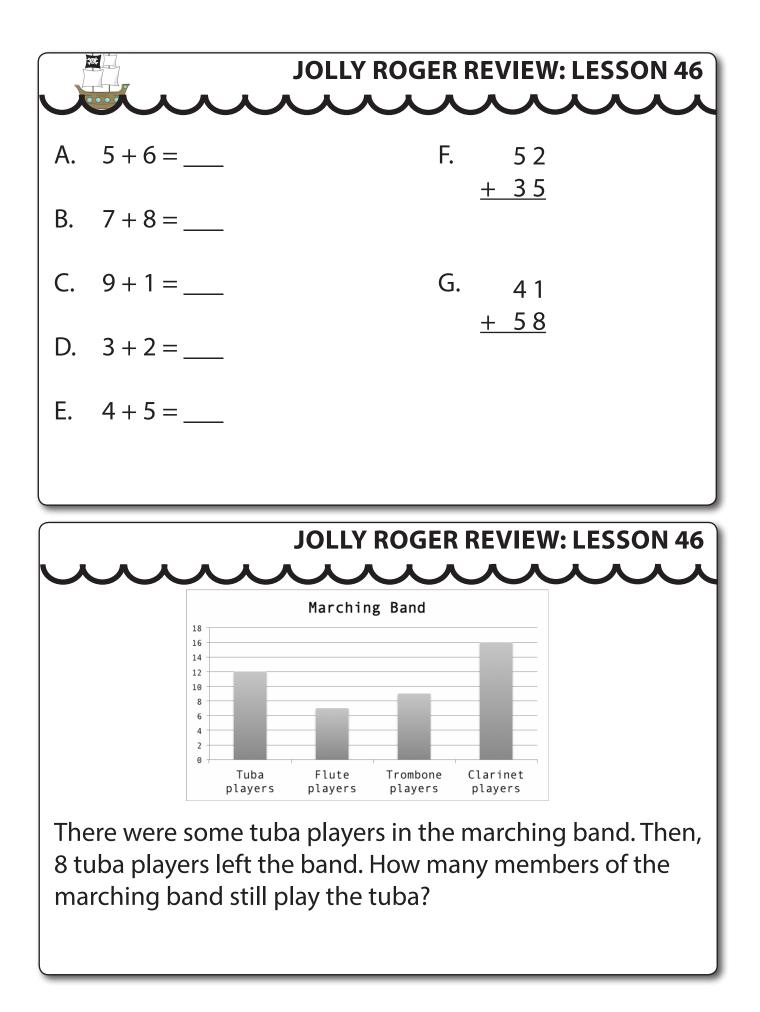


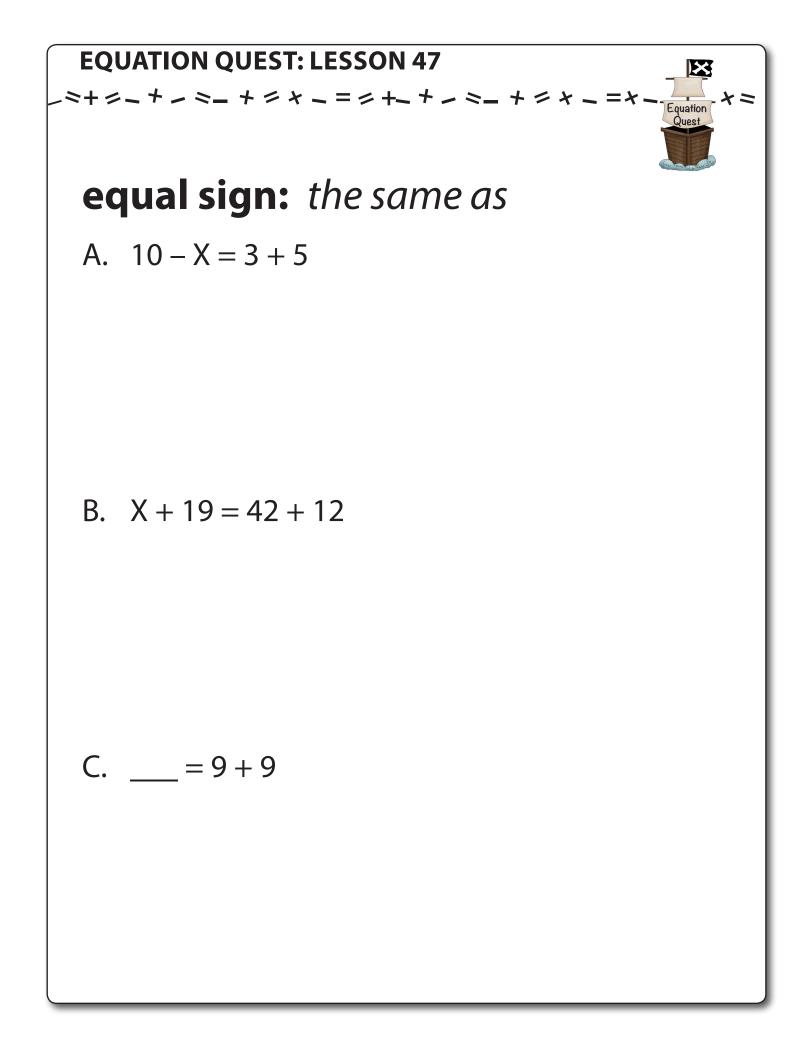


A. Gabriella and Emilio decided to make 24 cupcakes for their class. They started with \$29. They went to the store and bought sugar, flour, and icing for \$13. How much money do they have left?

B. Zoe bought 13 paintings. She sold 9 paintings. Then, she bought 3 more paintings. How many paintings does Zoe have now?

C. Amari had some cookies. Then, he baked 49 more cookies. Now he has 85 cookies. How may cookies did he have to start with?

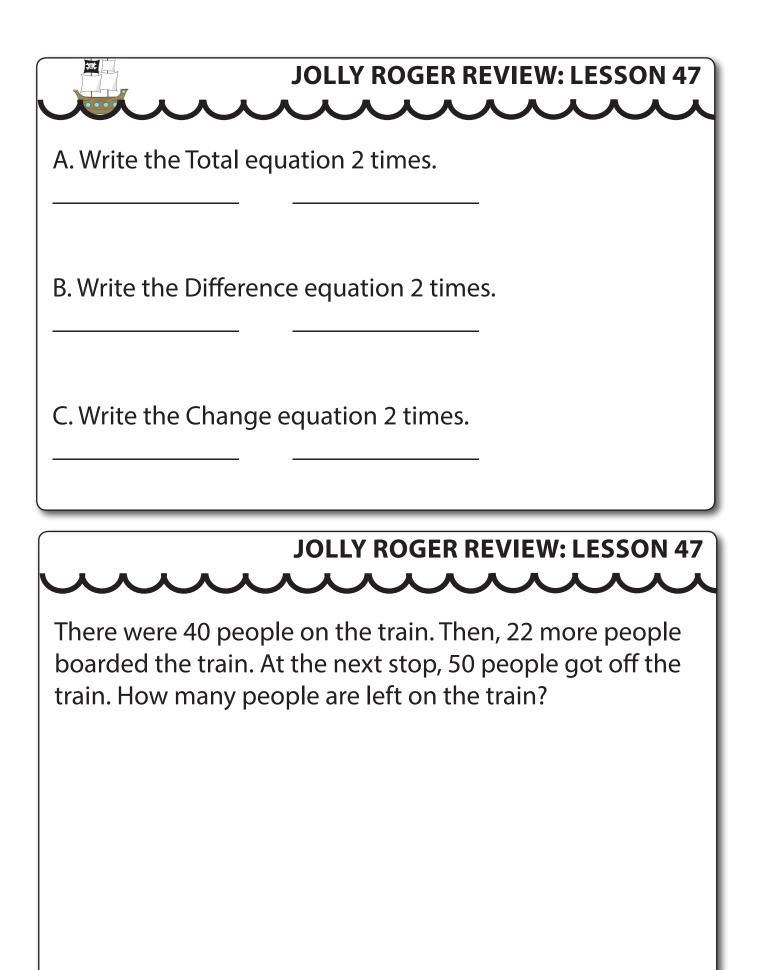


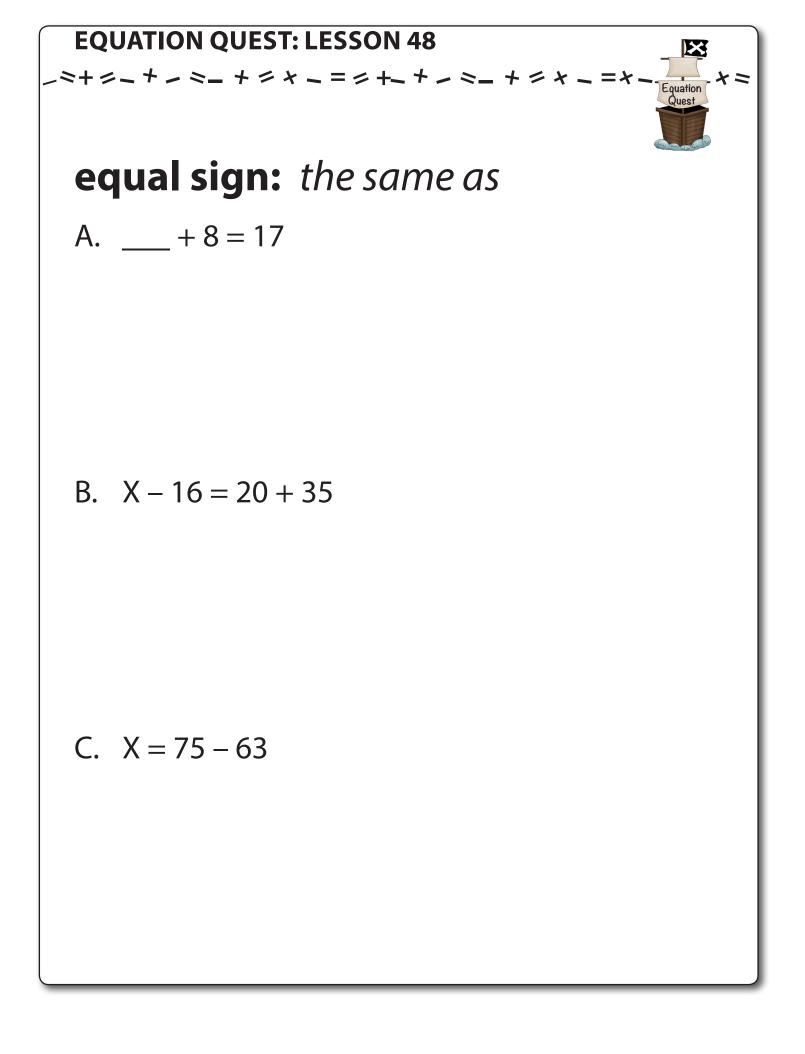


BUCCANEER PROBLEMS: LESSON 47 Α. Money Spent at the Mall \$18 \$16 \$14 \$12 \$10 \$8 \$6 \$4 \$2 \$0 Tina Rosa Jose Lou

Lou earned some money raking leaves. Then, he spent money at the mall and has \$25 left. How much money did Lou have to start with? B. Mom put some jelly doughnuts on a plate. Then, Leonardo ate 3 doughnuts. Now, there are only 18 doughnuts left. How many doughnuts were on the plate at first?

C. A bus had 13 passengers. Then, some more passengers got on the bus. Now, the bus has 46 passengers. How many passengers got on the bus?

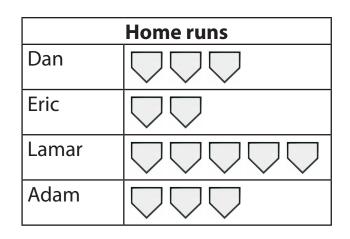




A. There were some girls on the soccer team. Then, 6 new girls joined the team. Now there are 19 girls on the team. How many girls were on the team at first?

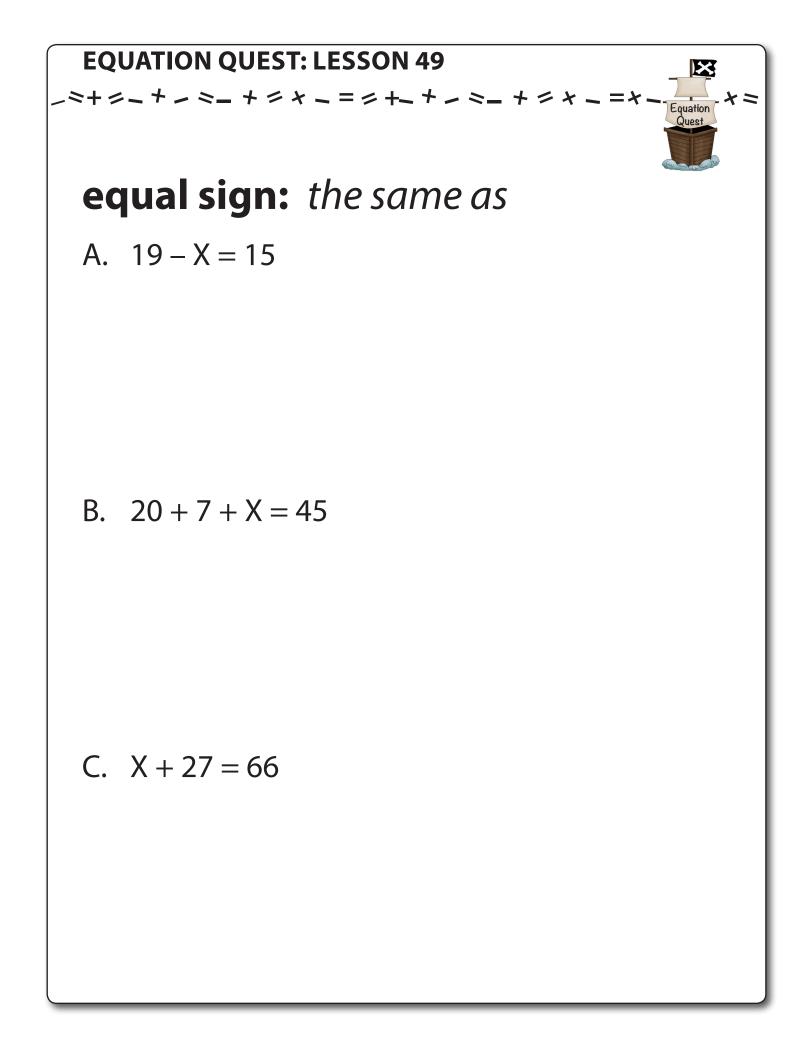
B. In the morning, it rained 2 inches. Then in the afternoon it rained some more. Over the whole day, it rained 5 inches. How many inches did it rain in the afternoon?

C.



How many home runs did Dan, Lamar, and Adam hit?

A. Write the	e Total equ	ation 2	2 time	S.		
B. Write the	e Difference	e equa	tion 2	times.		
C. Write the Change equation 2 times.						
		JOLL	(ROG	ER RE	VIEW: LI	ESSON 48
	Cans of					ESSON 48
White						ESSON 48
White Red			(ROG		VIEW: LI Each 10 cans.	stands for
			(ROG		Each	
Red					Each	
Red Green Blue		Paint			Each 10 cans.	stands for



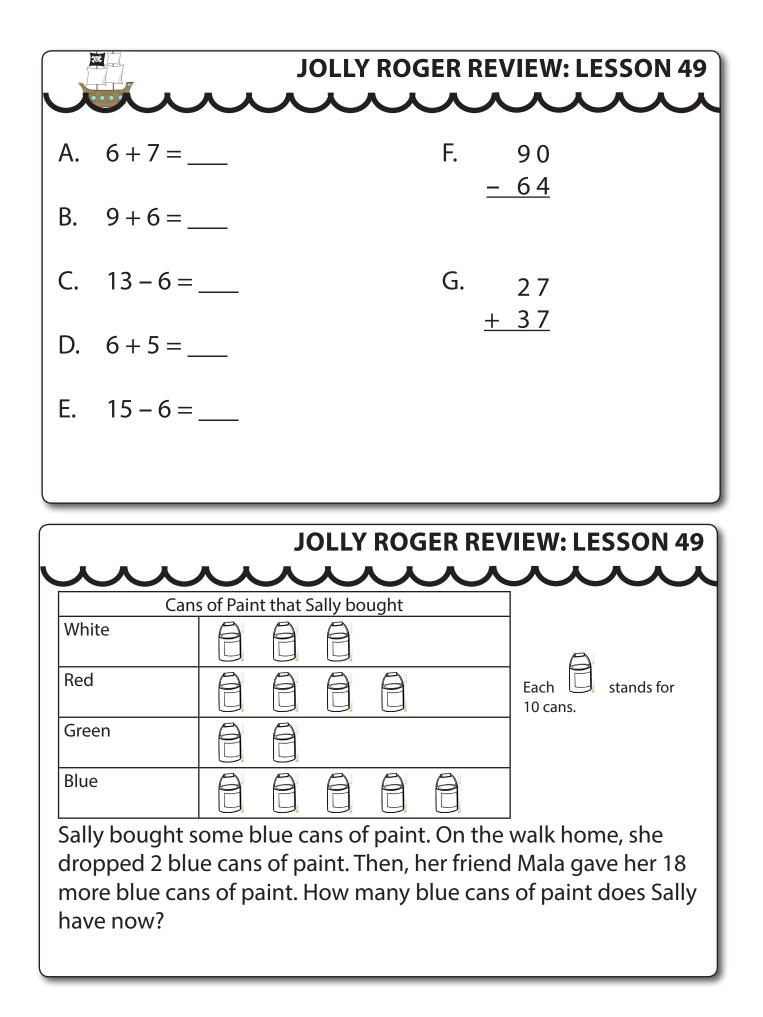
A. There were 41 kids at the lunch table. Then, 9 kids got up to buy milk and 13 kids cleared their trays. How many kids are at the table now?

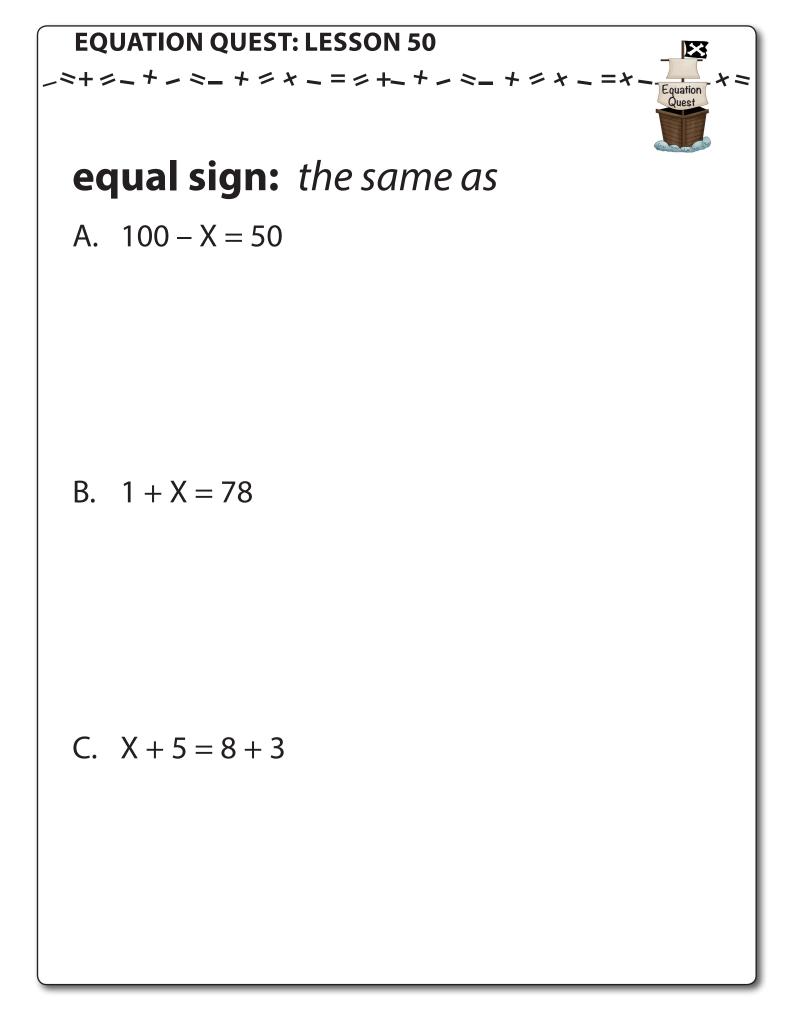
B. Marta planted 34 lettuce plants in her garden. Then, she planted 13 more lettuce plants. One night a rabbit ate 22 of her lettuce plants. How many lettuce plants does Marta have left? C.

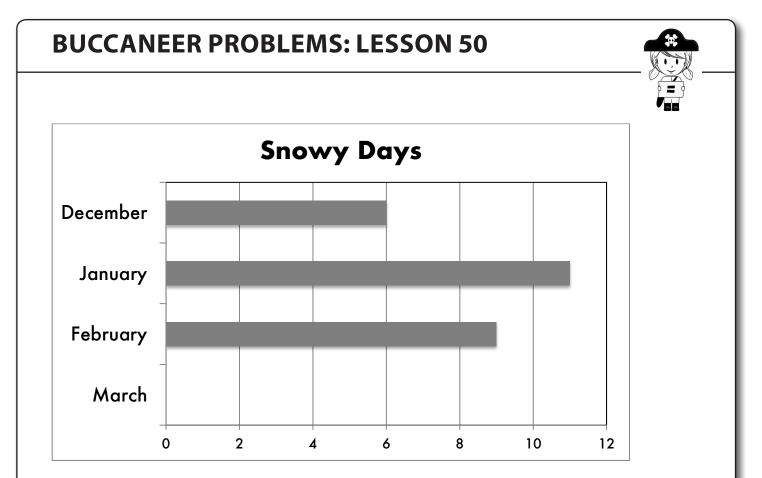
Toy Prices				
Video				
Blocks				
Doll House				

Each 🔅 stands for \$5.

Mariana had \$20 in her piggy bank. Her grandma gave her \$20 for her birthday. Then, she bought blocks. How much money does Mariana have now?



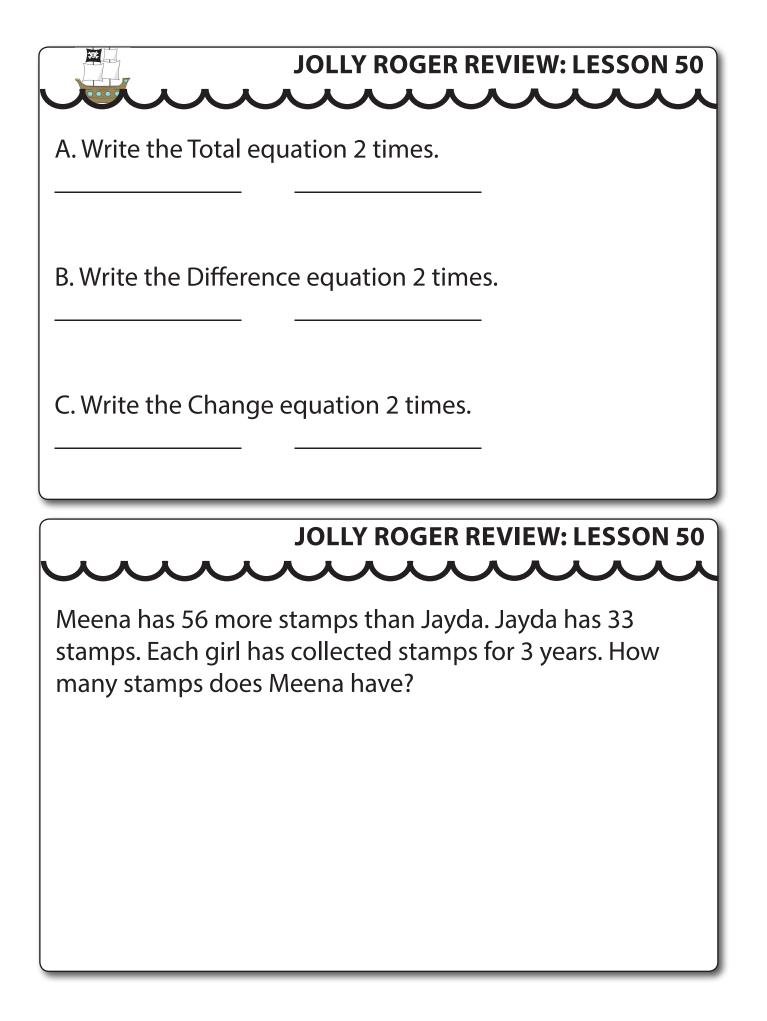


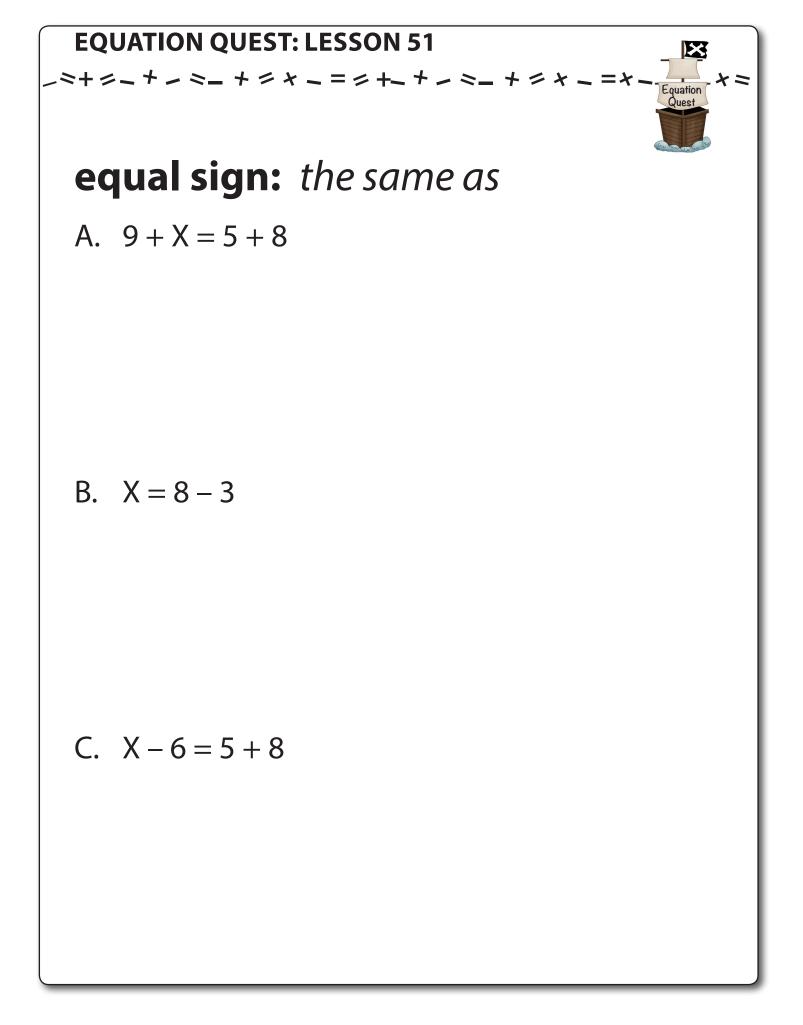


A. There were 3 fewer snowy days in March than in December. How many snowy days were there in March?

B. How many snowy days were there in January, February, and March?

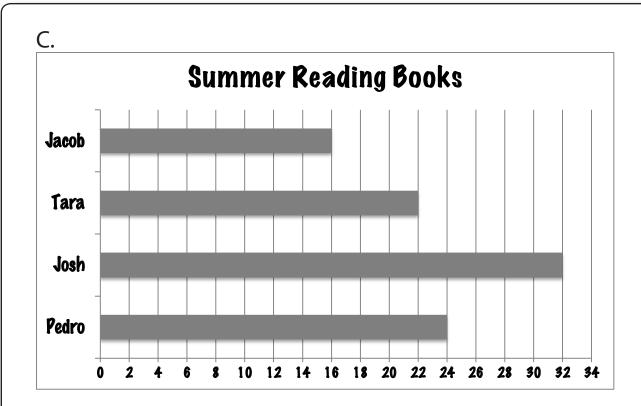
C. Abdul made 16 cupcakes. Then, he made 6 more. His friends ate 8 of the cupcakes. How many cupcakes are left?





A. A pirate had a collection of swords. He had 27 swords, but then some swords fell in the sea during a stormy night. If the pirate has 15 swords left, how many swords did he lose in the storm?

B. Faith had 37 snowballs in her pile. Then she made 23 more snowballs. Then Cam gave her 14 more snowballs. How many snowballs does Faith have?



How many more books did Pedro read than Jacob?

