NAME | DATE

Operations & Equations page 1 of 2

1 Solve the addition and subtraction problems.

427 + 92 = **519**	728 + 436 = **1,164**	246 + 795 = **1,041**	500 – 150 = **350**	280 – 145 = **135**
285 – 143 = **142**	964 – 528 = **436**	835 – 297 = **538**	603 – 465 = **138**	460 – 235 = **225**

2 Write a greater than, less than, or equal sign to complete each equation.

36 + 4 **<** 26 + 20

5 × 8 **>** 10 × 3

12 + 18 **=** 2 + 28

25 – 10 **=** 35 – 20

2 × 12 **>** 2 × 8

1 × 9 **<** 3 × 4

CHALLENGE

890 – 500 **>** 756 – 540

400 **=** 150 + 250

2 × 96 **<** 4 × 50

1 × 450 **=** 500 – 50

3 Pick the equation that will help you solve the problem. Then solve the problem. Jake found 32 shells on the beach. He gave half of them to his brother. Then his sister gave Jake 18 more shells. How many shells does Jake have now?

○ (32 × 2) + 18 = ? ○ (32 × 2) – 18 = ? ● (32 ÷ 2) + 18 = ?

Work will vary.

Jake has **34** shells.

(continued on next page)

NAME | DATE

Operations & Equations page 2 of 2

4 Pick the equation that will help you solve the problem. Then solve the problem and show your work.

a The pet store got 53 fish. They sold 29 of the fish right away. They divided the rest of the fish evenly into 3 tanks. How many fish were in each tank? (The letter *f* in the equations below stands for fish.)

- ○ $53 - 29 = f$
- ● $(53 - 29) \div 3 = f$
- ○ $(53 + 29) \div 3 = f$
- ○ $53 + 29 \times 3 = f$

Work will vary.

There were 8 fish in each tank.

b **CHALLENGE** You can get Fantastic Fish Food at the pet store in two different sizes. The smaller size is 60 grams. The larger size is 3 times that much, plus another 11 grams. How many grams is the larger size? (The letter *g* in the equations below stands for grams.)

- ○ $(60 + 3) + 11 = g$
- ○ $(60 \times 3) - 11 = g$
- ● $(60 \times 3) + 11 = g$
- ○ $(60 \div 3) \times 11 = g$

Work will vary.

The larger size is 191 grams.

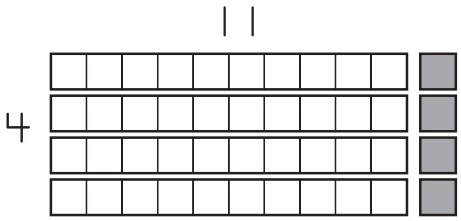
NAME | DATE

Multiplying by Elevens & Twelves page 1 of 3

1 Sam and Terra built some multiplication arrays with base ten area pieces. For each of their arrays:

- Label the dimensions.
- Write two different equations to show how many units there are.

ex

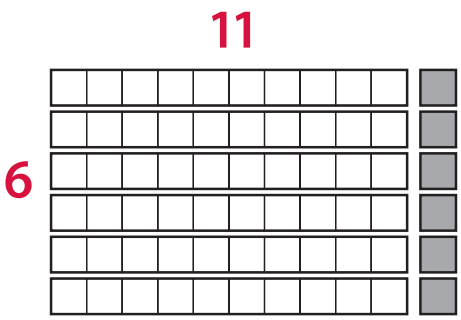


Equations:

|| + || + || + || = 44

4 × || = 44

a



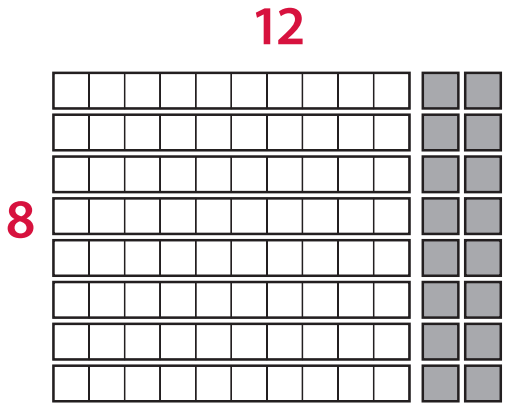
Equations:

6 × 11 = 66

60 + 6 = 66

(11 × 3) + (11 × 3) = 66

b



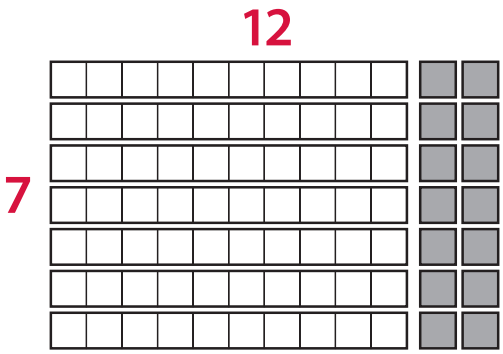
Equations:

8 × 12 = 96

(8 × 10) + (8 × 2) = 96

48 + 48 = 96

c



Equations:

7 × 12 = 84

(7 × 10) + (7 × 2) = 84

70 + 14 = 84

Student equations will vary. Examples shown above.

(continued on next page)

NAME | DATE

Multiplying by Elevens & Twelves page 2 of 3

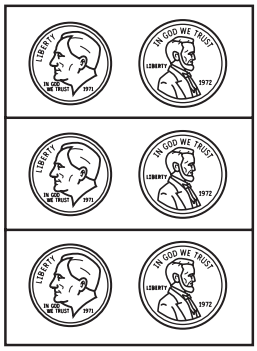
2 Holly and Micah used dimes and pennies to show some multiplication facts. Write a multiplication equation to show how much money is shown in each arrangement.

ex

Multiplication equation:

2 × 12¢ = 24¢

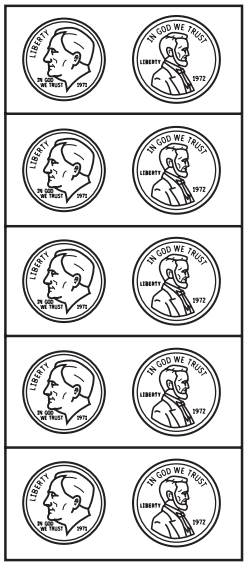
a



Multiplication equation:

3 × 11 = 33¢

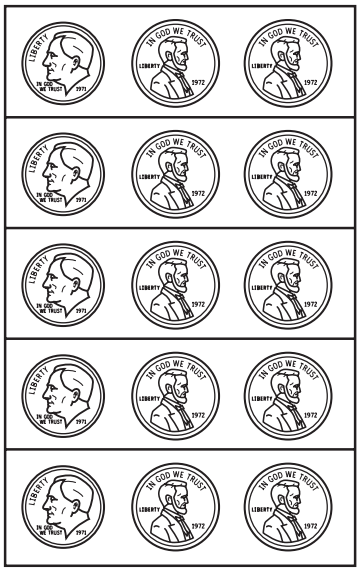
b



Multiplication equation:

5 × 11 = 55¢

c



Multiplication equation:

5 × 12 = 60

Student equations will vary. Examples shown above.

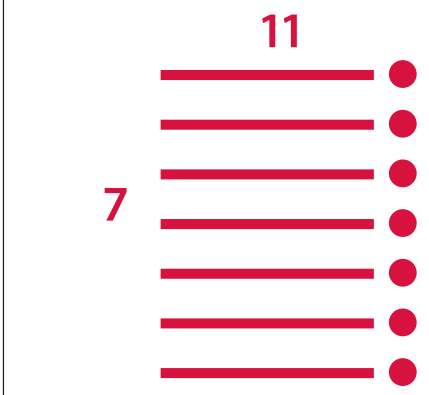
(continued on next page)

NAME | DATE

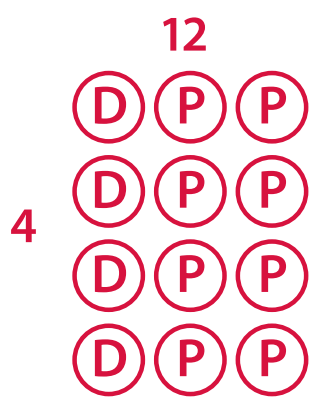
Multiplying by Elevens & Twelves page 3 of 3

3 Make sketches of dimes and pennies or base ten area pieces to show and solve each problem. Label your sketches.

a $7 \times 11 =$ 77



b $4 \times 12 =$ 48



Work will vary. Examples shown.

4 Use numbers, pictures, or words to solve each of the problems below. Show all of your work.

a King School is holding a bake sale. Jose's mom brought 2 dozen chocolate chip cookies, and Jana's dad brought 3 dozen peanut butter cookies. The helpers took the cookies out of their bags and put them on plates. They put 10 on every plate. How many plates did they need?

6 plates; work will vary.

b Sam was helping his mom plant a garden. They planted 7 rows of lettuce. Four of the rows had 11 lettuce plants. Three of the rows had 12 lettuce plants. How many lettuce plants did they plant in all?

80 lettuce plants; work will vary.

NAME | DATE

Multiplication, Division & Perimeter Practice page 1 of 2

1 Complete the multiplication facts.

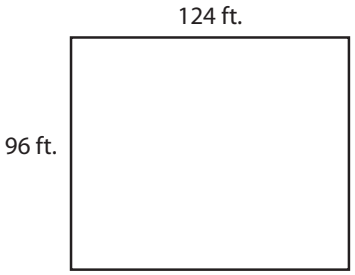
10 × 8 = 80	9 × 1 = 9	5 × 7 = 35	3 × 0 = 0	4 × 8 = 32	5 × 6 = 30	9 × 2 = 18
2 × 7 = 14	9 × 5 = 45	4 × 10 = 40	3 × 4 = 12	5 × 8 = 40	4 × 7 = 28	10 × 10 = 100

2 Complete the division facts

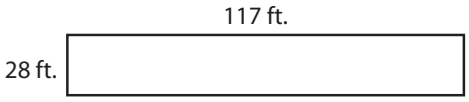
40 ÷ 5 = 8 12 ÷ 2 = 6 90 ÷ 10 = 9

8 ÷ 1 = 8 25 ÷ 5 = 5 14 ÷ 2 = 7

3 Find the perimeter of each rectangle.



Perimeter = 440 ft.



Perimeter = 290 ft.

4 What is the difference between the perimeters of the rectangles above?

150 ft.

(continued on next page)

NAME | DATE

Multiplication, Division & Perimeter Practice page 2 of 2

Show all your work when you solve these problems. Use numbers, sketches, or words.

5 Dale and Lori are buying a watch for their father for his birthday. The watch they want to get him usually costs $129 but it is on sale for $60 less.

a How much will the watch cost?

$69; work will vary.

b If they each pay half, how much will Dale pay?

$34.50; work will vary.

c If they let their brother, Mike, go in on the gift, how much will each pay?

$23; work will vary.

6 **CHALLENGE** Mrs. Larsen wanted her class to work in groups of 4. After she divided them into groups, there were 6 groups of 4 and 1 group of 3.

a How many students were in the class? Write and solve an equation to represent this problem.

27 students; work will vary.
$(6 \times 4) + 3 = 27$

b If the teacher wanted all the groups to be exactly the same size, how many students should be in each group? How many small groups would there be? Show all your work.

3 groups of 9 or 9 groups of 3; student work will vary.

NAME | DATE

More Multiplication Review page 1 of 2

1 Complete the multiplication facts.

70 × 2 = 140	60 × 3 = 180	8 × 30 = 240	40 × 4 = 160	7 × 10 = 70	9 × 50 = 450	30 × 9 = 270
50 × 6 = 300	8 × 60 = 480	7 × 50 = 350	40 × 3 = 120	70 × 8 = 560	4 × 90 = 360	80 × 4 = 320

2 Fill in the missing number in each fact. Then write a related division equation.

4 × 5 = 20	20 ÷ 5 = 4
7 × 3 = 21	21 ÷ 3 = 7
5 × 5 = 25	25 ÷ 5 = 5
2 × 7 = 14	14 ÷ 7 = 2

3 **CHALLENGE** Solve the following:

24 × 2 = 48	14 × 10 = 140	14 × 5 = 70	63 × 2 = 126	52 × 3 = 156	10 × 69 = 690	24 × 4 = 96

4 Sarah says you only need to measure one side of a square to figure out its perimeter. Do you agree with Sarah? Why or why not? Use labeled sketches, numbers, or words to explain your answer.

Agree. Responses will vary. Since all 4 sides of a square are the same length, you can calculate the perimeter with only one side's length known.

(continued on next page)

NAME | DATE

More Multiplication Review page 2 of 2

Use labeled sketches, numbers, or words to explain your answers when you solve these problems.

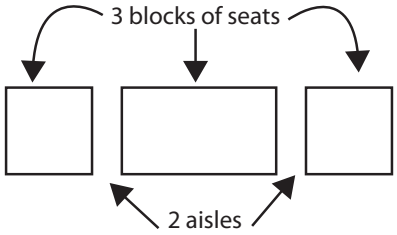
5 Andrea got some free carpet squares at a carpet store. She got enough blue squares to cover 2 feet by 8 feet and enough red squares to cover 5 feet by 8 feet. How many total square feet can be covered if Andrea puts these carpet squares together?

56 feet; work will vary.

6 Mark the two equations below that could be used to help solve Problem 5.

- ○ $(2 + 8) \times (5 + 8) = a$
- ● $(2 \times 8) + (5 \times 8) = a$
- ○ $(2 + 5) + 8 = a$
- ● $(2 + 5) \times 8 = a$

7 **CHALLENGE** The movie theater in our town has 2 aisles and 3 blocks of seats. Two blocks of seats each have 24 rows of 7 seats. The middle block of seats has 24 rows of 14 seats. How many seats are in the theater in all? Show all your work.



672 seats; work will vary.

NAME | DATE

Hours to Minutes page 1 of 2

1 There are 60 minutes in an hour. Use that information to help solve the word problems below. For each problem:

- Write an equation to match each problem and solve it.
- Write the answer on the line.

a James stayed at the After-School club for 2 hours on Tuesday. How many minutes was James at the After-School Club?

Work will vary, example:
2 hrs × 60 min/hr = 120 mins.

James was at the After-School Club on Tuesday for **120** minutes.

b Kara babysat her little cousin from 4:00 p.m. to 7:00 p.m. on Saturday. How many minutes did she babysit her little cousin?

Work will vary, example:
3 hrs × 60 min/hr = 180 mins.

Kara babysat her little cousin for **180** minutes.

c Carlos started his chores at 9:30 a.m. He finished at 11:30 a.m.. How many minutes did he spend doing his chores?

Work will vary, example:
2 hrs × 60 min/hr = 120 mins.

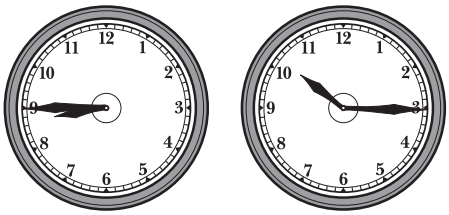
Carlos spent **120** minutes doing chores.

(continued on next page)

NAME | DATE

Hours to Minutes page 2 of 2

2 Mrs. Ramos went out shopping at the time shown on the first clock. She came back at the time shown on the second clock.



a How many hours was Mrs. Ramos out shopping? How did you figure it out?

1 ½ hours; work will vary.

b How many minutes was Mrs. Ramos out shopping? Use numbers, labeled sketches, or words to solve the problem. Show your work.

90 minutes; work will vary.

3 Fill in the lines with the missing numbers.

$3 \times 40 =$ **120** $6 \times 60 =$ **360** $3 \times 20 =$ **60**

$5 \times 50 =$ **250** $60 \times$ **5** $= 300$ $4 \times$ **30** $= 120$

$20 \times$ **4** $= 80$ $30 \times$ **7** $= 210$ $50 \times$ **3** $= 150$

4 **CHALLENGE** Are the expressions below equal? If they are, put an = sign in the space. If they aren't, put ≠ in the space. (The symbol ≠ means not equal.)

30×60 **≠** 2×90 40×3 **≠** 20×4 60×4 **=** 80×3

NAME | DATE

Telling Time to the Minute page 1 of 2

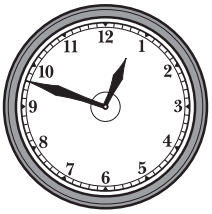
1 Fill in the circle next to the time shown on each clock.

- ○ 5:47
- ○ 4:45
- ● 4:47
- ○ 5:50

- ○ 10:30
- ● 10:28
- ○ 11:28
- ○ 12:30

2 Write the time shown on each clock.

5 : 32



12 : 48

3 Circle the digital clock that shows the same time as this analog clock.

4 **CHALLENGE** What fraction of a clock is represented if the hands are at 12 and 3?

Correct responses: ¼ or ¾.

(continued on next page)

NAME | DATE

Telling Time to the Minute page 2 of 2

Show your work when you solve these problems.

5 Konnel is saving money to buy a chemistry set. He has saved $50 so far. That's $\frac{1}{3}$ of the cost of the chemistry set.

a How much does the chemistry set cost?

$150; work will vary.

b How much more money does Konnel need to save to have $\frac{1}{2}$ the cost of the chemistry set?

$25; work will vary.

6 **CHALLENGE** In marathon swimming, athletes swim distances of 10 km or more. Just like in running, swimmers can swim half-marathons and quarter-marathons as well.

a If a marathon swim is 10 km, how many meters would you swim in a half-marathon?

5,000 m; work will vary.

b How many meters would you swim in a quarter-marathon?

2,500 m; work will vary.

Note: A previous version of this page had different problems and answers. The answers to those problems were: 50 miles, 25 miles, $75, and $12.50.

NAME | DATE

Division & Fractions page 1 of 2

1 Complete the division facts.

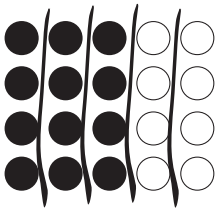
20 ÷ 5 = 4 20 ÷ 10 = 2 18 ÷ 2 = 9

18 ÷ 3 = 6 18 ÷ 6 = 3 18 ÷ 9 = 2

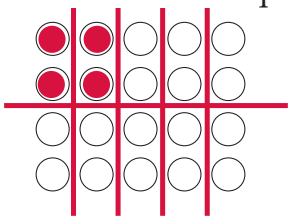
2 Divide each set into equal groups. Shade in some circles as directed.

Work will vary. Examples shown.

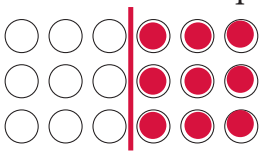
ex Shade in $\frac{3}{5}$ of the circles.
Hint: Divide the set into 5 groups.



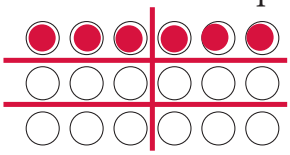
Shade in $\frac{2}{10}$ of the circles.
Hint: Divide the set into 10 equal groups.



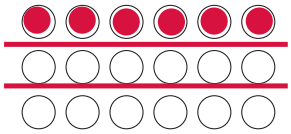
Shade in $\frac{1}{2}$ of the circles.
Hint: Divide the set into 2 equal groups.



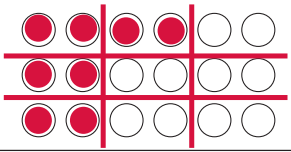
Shade in $\frac{2}{6}$ of the circles.
Hint: Divide the set into 6 equal groups.



Shade in $\frac{1}{3}$ of the circles.
Hint: Divide the set into 3 equal groups.



Shade in $\frac{4}{9}$ of the circles.
Hint: Divide the set into 9 equal groups.



3 **a** Find two fractions above that are equal. Write them here.

Answers will vary. For example, ⅔ and ⅓ are equal.

b How do you know the fractions are equal?

Responses will vary. Example: ⅔ and ⅓ are equal because they are both equal to ⁶⁄₁₈.

4 Write each of these fractions where they belong on the number line: $\frac{1}{2}$, $1\frac{1}{4}$, $\frac{1}{3}$, $1\frac{3}{4}$

(continued on next page)

NAME | DATE

Division & Fractions page 2 of 2

5 Daniel, Emilia, Mía, and Aarón were picking pears in their grandparents' orchard. They had each picked the same number of pears at lunch time, when their grandpa gave them each 6 more pears. Now the four kids had 80 pears in all.

a How many pears did each child have before their grandpa gave them more? Show your work.

14 pears; work will vary.

b Mark the equation that could help you solve problem 5a.

- ○ $p + 6 + 4 = 80$
- ○ $80 - (6 \times 4) = p$
- ● $80 = (6 \times 4) + (p \times 4)$
- ○ $(80 \div 4) + 6 = p$

c Write an equation that shows another way to solve the problem. Use h for the unknown number.

Work will vary.
Examples: $(h + 6) \times 4 = 80$; $(80 \div 4) - 6 = h$

6 The next day, the kids went to a nut orchard and picked up 220 hazelnuts. They gave $\frac{1}{4}$ of the hazelnuts to their neighbor and their mother used $\frac{2}{4}$ of the hazelnuts in muffins. The rest of the hazelnuts were saved for snacks.

a How many hazelnuts went into the muffins? Show your work.

110 hazelnuts; work will vary.

b How many hazelnuts did the family have for snacking? Show your work.

55 hazelnuts; work will vary.

Note: A previous version of this page had different problems and answers. The answers to those problems were: 7 strawberries, the first and last options, a student-written equation (work will vary), 62 strawberries, and 31 strawberries.

NAME | DATE

Quadrilaterals & Fractions page 1 of 2

1 Fill in the bubble to show the answer. Then write an explanation.

a This shape is a:

○ trapezoid ○ square ● parallelogram ○ rectangle

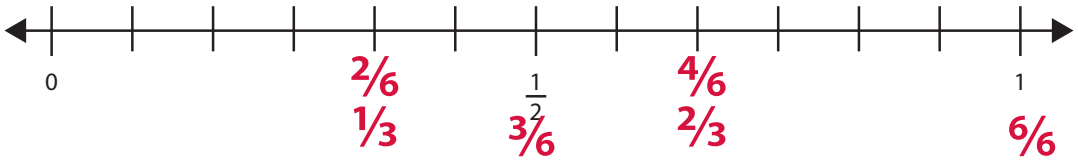
b Explain why: **Student responses will vary.**
Example: *It has 2 pairs of parallel sides.*

c How do you know that the shape in the problem above is *not* a rectangle? Use labeled sketches, numbers or words to explain.

Student responses will vary. Example: *It can't be a rectangle because it doesn't have 4 right angles, it has 0 right angles.*

2 **a** Write these fractions where they belong on the number line below:

$\frac{4}{6}$ $\frac{2}{6}$ $\frac{6}{6}$ $\frac{3}{6}$ $\frac{1}{3}$ $\frac{2}{3}$

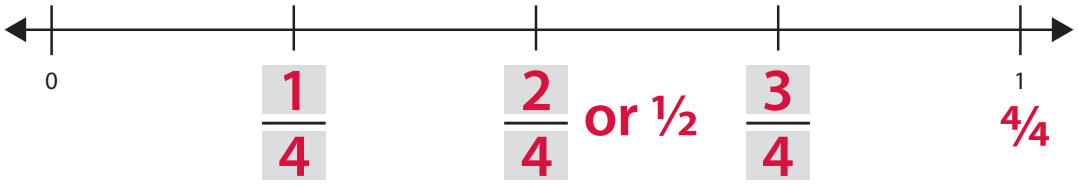


b Name two pairs of equivalent fractions from the number line above.

2/6 = 1/3 and 1/2 = 3/6 or 4/6 = 2/3

c What fraction is equivalent to 1 on the number line above? 6/6 = 1

3 **a** Write in fractions on the number line below:



b Name two equivalent fractions from the number line above.

2/4 = 1/2

c **CHALLENGE** Write in a fraction for 1 on the number line for problem 3a.

(continued on next page)

NAME | DATE

Quadrilaterals & Fractions page 2 of 2

4 Jenny worked on her homework from 6:15 until 7:15 last night. Spelling took $\frac{1}{6}$ of the time; math took $\frac{1}{3}$ of the time and reading took $\frac{1}{2}$ of the time.

a Jenny spent 10 minutes on spelling.

b Jenny spent 20 minutes on math.

c Jenny spent 30 minutes on reading.

5 CHALLENGE The students at Shady Cove School voted for a school mascot. Half the votes went to the Pilots and Mariners, with the Mariners getting 30 more votes than the Pilots. The Eagles got 60 votes and the Dolphins got twice as many votes as the Eagles.

a What is the new mascot of Shady Cove School? How do you know?

Dolphins. Work will vary. Example:
Eagles: 60 Pilots: 75
Dolphins: 120 Mariners: 105

b How many students voted? Show your work.

360; work will vary. Example:
Half the votes = 180
Total votes = 360

NAME | DATE

More True or False Challenges page 1 of 2

1 An equation is true if both sides are equal. It is false if both sides are not equal. Circle true or false for each equation. You do not need to explain all your answers.

	Equation	Circle One		Optional Explanation
ex	$18 - 3 = 5 \times 3$	(T)	F	18 − 3 is 15 and 5 + 5 + 5 = 15
a	$5 + 8 = 3 \times 4$	T	(F)	Student responses will vary.
b	$6 \times 4 = 3 \times 8$	(T)	F	
c	$20 - 10 = 20 \div 2$	(T)	F	
d	$8 + 8 = 4 \times 5$	T	(F)	
e	$5 + 7 = 20 - 8$	(T)	F	

2 Use <, >, or = to complete each equation.

ex $32 + 876$ **>** $870 + 24$

a $100 \div 10$ **<** $100 \div 5$

b 6×7 **>** 5×8

c $478 - 138$ **<** $678 - 132$

3 Pick the equation that will help you solve the problem. Then solve the problem.

a Josh got 7 toy cars from each of his 4 brothers. He gave 12 cars to his friend. How many cars did he have left?

- ○ $7 + 4 - 12 = c$
- ● $(7 \times 4) - 12 = c$
- ○ $(7 \times 12) - 4 = c$

b Josh has 16 cars left.

4 Pick the equation that will help you solve the problem. Then solve the problem.

a Sarah left her house at 3:00. It took her 15 minutes to go to the bank. Then it took her 20 minutes to do some shopping. Then it took 15 minutes to drive home. What time did Sarah get home?

- ○ $300 - 15 - 20 - 15 = m$
- ○ $15 + 20 - 15 = m$
- ● $15 + 20 + 15 = m$

b Sarah got home at 3:50.

(continued on next page)

NAME | DATE

More True or False Challenges page 2 of 2

Use labeled sketches, numbers, or words to show your work on these problems.

5 Sage's Aunt Barbara is making her famous orange spongecake for a party. The recipe requires 5 eggs and makes a cake that will serve 8 people. 72 people will be at the party.

a How many cakes should Aunt Barbara make?

9 cakes; work will vary.

b How many dozens of eggs will she need to make that many cakes?

4 dozen; work will vary.

c How many eggs will be left over?

3 eggs; work will vary.

6 **CHALLENGE** Cameron is having a birthday party. His father bought a baseball cap for every party guest. He didn't buy a cap for Cameron because he already had one. The baseball caps cost $5.95 each. Cameron's dad spent $71.40 on the caps. How many kids came to the party?

12 kids; work will vary.

