Lesson 1-1

Practice: Skills, Concepts, and Problem Solving

Name each operation modeled.

1 ▢▢▢▢ – ▢▢ = ▢▢
▢▢▢▢

_____

2 ▢▢▢▢▢ + ▢▢ = ▢▢▢▢▢▢
▢▢▢▢   ▢▢   ▢▢▢▢▢

_____

Name the operation needed to solve each problem. Write a number sentence to solve each problem.

3 **READING**   Maria is reading a book that has 365 pages. Last night she read the first 85 pages. How many pages are left to read?

_____

4 **SHOPPING**   Dylan bought a music CD for $16 and a T-shirt for $8. How much money did he spend in all?

_____

Solve.

5 **BAKING**   Manu is making apple pies. He needs 5 pounds of red apples and 3 pounds of green apples. How many pounds of apples does he need in all?

_____

6 **SCHOOL**   A computer lab has 12 desktop computers and 15 laptop computers. How many computers does the lab have in all?

_____

7 **SURVEYS**   A survey shows which kinds of toothpaste people like best. How many more people like Smiley Bright toothpaste than Sparkle and Shine toothpaste?

_____

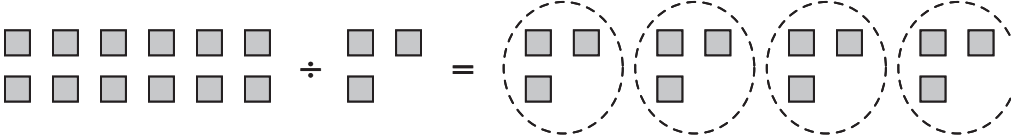| Favorite Toothpaste Survey	
Brand	Number of People
Smiley Bright	38
Clean and Fresh	46
Sparkle and Shine	21

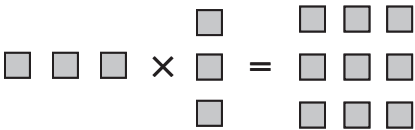**Write the vocabulary word that completes each sentence.**

8   The answer to an addition problem is called the _____.

9   The answer to a subtraction problem is called the _____.

Lesson 1-2 **Practice: Skills, Concepts, and Problem Solving**

Name each operation modeled.

1 □□□□□□ ÷ □□ = (□□ □)(□□ □)(□□ □)(□□ □)
□□□□□□   □   □   □   □   □

_____

2 □   □□□
□□□ × □ = □□□
□   □□□

_____

Name the operation needed to solve each problem. Write a number sentence to solve each problem.

3 **CANDLES**   Ms. Curreri's birthday cake has 3 rows of candles. Each row has 8 candles. How many candles are on the cake?   _____
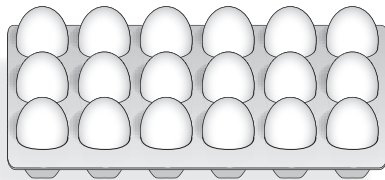
4 **LEMONADE**   Mrs. Flores bought 4 bottles of lemonade. The total cost was $8. How much was each bottle of lemonade?   _____

Solve.

5 **PRINTERS**   A laser printer can print 20 pages each minute. How many pages can it print in 15 minutes?   _____

6 **SCHOOL BUS**   A school bus holds 20 students. There are 5 rows of seats on the bus and the same number of seats in each row. How many seats are in each row?   _____

7 **EGGS**   A large egg carton contains 18 eggs. Write a division equation to show how many eggs are in each row.   _____

8 **CEREALS**   A box of cereal contains 9 servings. One serving is 30 grams. How many grams of cereal are in the box?   _____

Math Triumphs

Lesson 1-3 Practice: Skills, Concepts, and Problem Solving

1 Show that adding 3 to each side of $(5 + 2) = (6 + 1)$ results in a true equation.

2 Show that multiplying 2 on each side of $(2 \cdot 2) = (4 \cdot 1)$ results in a true equation.

Show that adding or multiplying a number on each side results in a true equation.

3 $(9 + 5) + 5 = (7 + 7) + 5$

_____ + 5 = _____ + 5

_____ = _____

4 $(8 \cdot 4) \cdot 3 = (16 \cdot 2) \cdot 3$

_____ $\cdot$ 3 = _____ $\cdot$ 3

_____ = _____

Solve. Write the equation used to solve each problem.

5 **SPORTS CARDS** Julian has 10 baseball cards and 15 football cards. Laura has 13 baseball cards and 12 football cards. They each have 8 basketball cards. Do Julian and Laura have the same number of sports cards?

_____

6 **LUNCH** Delilah buys a veggie burger and a bottle of water for lunch. Carlos buys a tuna-fish sandwich and a carton of milk for lunch. They both buy an oatmeal cookie. Do Delilah and Carlos spend the same amount of money on lunch? If not, how much does each person spend?

Lunch Menu

Veggie Burger $2.50
Turkey Sandwich $3.00
Tuna fish Sandwich $2.75

Soda $1.00
Bottled Water $0.75
Milk $0.75

Oatmeal cookie $0.50
Fruit Bowl $0.75

_____

Vocabulary Check. Write the vocabulary word that completes each sentence.

7 An _____ is a mathematical sentence that contains an equal sign, =, indicating that the left side of the equal sign has the same value as the right side.

8 The _____ Property of Equality states that adding the same amount to both sides of an equation keeps the equation balanced.

Math Triumphs

Lesson 1-4 **Practice: Skills, Concepts, and Problem Solving**

Find the value of each box or variable by modeling the equation.

1 $2 \times \square = 12$

$\square = $ _____

2 $\dfrac{w}{4} = 3$

$w = $ _____

Find the value for the box or the variable in each equation.

3 $4 \times n = 48$

$n = $ _____

4 $2z + 5 = 17$

$z = $ _____

5 $\dfrac{a}{5} - 2 = 3$

$a = $ _____

6 $16 - \square = 5$

$\square = $ _____

Solve.

7 **TIRES** Reba bought 2 new tires for her bicycle. Each tire cost $15. She also bought a basket for her bike. Reba spent $38 in all. How much did the basket cost? _____

8 **FIELD TRIP** Thirty-four students and adults went on a field trip to a museum. Eight adults went on the trip. How many students went? _____

9 **EQUATIONS** Mrs. Ortega wrote the following equation on the board: $6 \times r = 42$. Jonah said the $r = 36$. Was Jonah correct? Explain.

_____

_____

Vocabulary Check. Write the vocabulary word that completes each sentence.

10 You can use letters, boxes, or other symbols to represent _____ in an expression or equation.

11 Operations that undo each other are _____ operations.

Math Triumphs

Lesson
2-1 **Practice: Skills, Concepts, and Problem Solving**

Draw a model to show each equation.

1 $4 \cdot 2 = 2 \cdot 4$. Which property did you show?

_____

2 $5 + 8 = 8 + 5$. Which property did you show?

_____

Use the Commutative Properties to fill in each blank.
Then check your answer.

3 _____ $\cdot 4 = 4 \cdot 8$

_____ = _____

4 $15 +$ _____ $= 75 + 15$

_____ = _____

5 $3 + 41 = 41 +$ _____

_____ = _____

6 $12 \cdot 2 = 2 \cdot$ _____

_____ = _____

Solve.

7 **GARDENS** Silvia's garden has 5 rows of tomato plants with 6 plants in each row. Veronica's garden has 6 rows of tomato plants with 5 plants in each row. Whose garden has the greater number of tomato plants?

_____

8 **MOVIES** Carlos watched a movie that ran 120 minutes. Then he watched a movie that ran 70 minutes. Lily watched a movie that ran 70 minutes. Then she watched a movie that ran 120 minutes. Who spent more time watching movies?

_____

Lesson 2-2 Practice: Skills, Concepts, and Problem Solving

Draw a model to show (3 + 2) + 6 = 3 + (2 + 6). Which property did you show?

1 _____

Draw two different arrays to show (6 · 2) · 4 = 6 · (2 · 4). Which property did you show?

2 _____

Use the Associative Properties to find each sum, or product, mentally.

3 $7 + 5 + 2$

= (_____ + _____) + _____

= _____ + _____

= _____

4 $9 \cdot 2 \cdot 1$

= (_____ · _____) · _____

= _____ · _____

= _____

5 $3 \cdot 2 \cdot 10$

= (_____ · _____) · _____

= _____ · _____

= _____

6 $14 + 12 + 3$

= (_____ + _____) + _____
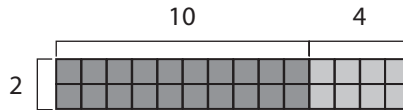
= _____ + _____

= _____

Solve.

7 **BOOKS** Josefina read 10 books during her summer vacation. Then she read 3 books in September and 5 books in October. How many books did Josefina read in all?
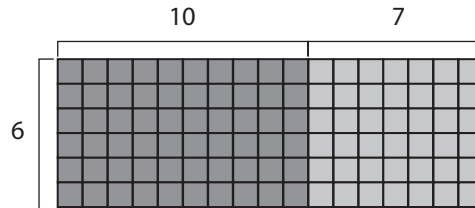
_____

Lesson 2-3 Practice: Skills, Concepts, and Problem Solving

Use the Distributive Property and a model to find each product.

1 $14 \cdot 2 = $ _____

10   4

2

2 $17 \cdot 6 = $ _____

10   7

6

Use the Distributive Property to find each product.

3 $4(3 + 9)$

_____ + _____

_____

4 $7(15 - 4)$

_____ − _____

_____

5 $9(3s + 7)$

_____ + _____

_____

6 $8(7 - 4b)$

_____ − _____

_____

Solve.

7 **EARNINGS** April earned $20 each week for 8 weeks. She spent $5 each week for 8 weeks. How much money does April have left?

_____

8 **CEREAL** Ramiro ate 7 servings of cereal this week. Alex ate 5 servings of cereal this week. A serving of cereal is 30 grams. How many total grams of cereal did Ramiro and Alex eat this week?

_____

Lesson
2-4 Practice: Skills, Concepts, and Problem Solving

Name the step that should be performed first in each expression.

1 $7 + 9 - 2 + 4 \cdot 4^2$

_____

2 $3 \cdot 18 + (9 - 2) + 3^2 \div 3$

_____

3 $(9 + 4 \cdot 2) - 12 \div 3 + 8^2$

_____

4 $20 \div 4 \cdot 2 - 9 \cdot 2 + 5$

_____

Find the value of each expression.

5 $4^2 + 13 + (9 - 1) \cdot 2$

_____

6 $15 \div (2^2 + 1^2) + 5 \cdot 2$

_____

7 $11 + 3 \cdot 2 + 8 - 8 \div 2$

_____

8 $(3 + 8 \cdot 2) - (18 - 3^2) + 1$

_____

Solve.

9 **SNACKS** Marla bought 4 boxes of granola bars. Each box contains 6 granola bars. Marla ate 3 granola bars, and she gave her brother 4 granola bars. Marla then bought 2 more boxes of granola bars. How many granola bars does Marla have now?

_____

10 **BOOKS** Daniel has 65 books on a book shelf. He divides the books equally among 5 shelves. He then moves 5 books on the top shelf to the bottom shelf. He also buys 3 new books and puts them on the top shelf. How many books are on the top shelf?

_____

Lesson 3-1

Practice: Skills, Concepts, and Problem Solving

Write 3 different expressions for each constant term and variable.

1 Constant term: -10 Variable: k _____

2 Constant term: 8 Variable: b _____

List the variable, constant, and coefficient in each expression.

3 $8j - 9$ variable: _____

constant: _____

coefficient: _____

4 $-5 + 10v$ variable: _____

constant: _____

coefficient: _____

5 $3c + 8$ variable: _____

constant: _____

coefficient: _____

6 $-x + 50$ variable: _____

constant: _____

coefficient: _____

7 $-7 - 20f$ variable: _____

constant: _____

coefficient: _____

8 $-\dfrac{h}{2} + 15$ variable: _____

constant: _____

coefficient: _____

9 $12s + 1$ variable: _____

constant: _____

coefficient: _____

10 $\dfrac{m}{4} - 6$ variable: _____

constant: _____

coefficient: _____

Solve.

11 LOADING   Amalia loaded 12 pallets onto her truck. Each pallet weighs 250 pounds. Write an expression to represent how much weight Amalia put on her truck.   _____

12 CHEMISTRY   Rohan mixes two solutions. The first solution is sodium chloride and has a volume of 115 mL. The second solution is potassium chloride and has a volume of 325 mL. Write an expression that represents the final volume of the two solutions mixed together.   _____

Write the vocabulary word that completes the sentence.

13 A letter or symbol used to represent an unknown quantity is called a _____.

14 A _____ is the number that is multiplied by the variable in a term.

Lesson 3-2 Practice: Skills, Concepts, and Problem Solving

For each phrase, name the operation.

1. the quotient of t and 3 _____

2. the number 2 plus q _____

3. 5 times f _____

4. 1 increased by m _____

5. the difference between k and 4 _____

6. the product of v and 10 _____

7. 80 divided by r _____

8. a decreased by 9 _____

Translate each phrase to an expression.

9. a number times 18 _____

10. 46 plus a number _____

11. 13 less than a number _____

12. a number divided by 11 _____

13. a number minus 20 _____

14. 53 more than a number _____

15. quotient of a number and 4 _____

16. 1,000 decreased by a number _____

17. 67 added to a number _____

18. product of 3 and a number _____

Solve.

19. **PIZZA** A mega-pizza feeds 6 students. Write an expression to find _____ the number of mega-pizzas needed for s students.

20. **DRILLS** An assembly line produces 4 electric drills every minute. _____ Write an expression for how many drills are made in m minutes.

Write the vocabulary word that completes the sentence.

21. A(n) _____ is the number that is multiplied by the variable in a term.

22. A(n) _____ is a combination of constants, variables, and operation symbols.

Math Triumphs

Lesson 3-3 **Practice: Skills, Concepts, and Problem Solving**

Name the like terms in each expression.

1 $7z + 8 - 2 + 4z$

_____

2 $9b^2 + 3 + 4b - 3 + b - 6b^2$

_____

3 $2a - 4 + 3 - 6a$

_____

4 $5h + 10h^2 + 3h^2 + 2h$

_____

Simplify each expression.

5 $2x + 8x + 5$ _____

6 $15 + 3y - y - 9$ _____

7 $12a + 5a^2 + 6a - 2a^2 + 3$ _____

8 $35g + g^2 - 7 + 7g + 43 + 20g^2$

_____

9 $13r + 8r - 16 + 19r^2 - 10r - 4$

_____

10 $8n + 9n^2 - 14n + 15n^2$ _____

Solve.

11 **NURSES** Kimi manages the nurses in the operating rooms at the local hospital. To run one operating room, she needs 1 scrub nurse, 2 nurses to assist the surgeon, and 1 nurse to assist the anesthesiologist. In addition, she always schedules 2 extra nurses for each shift. The expression $1n + 2n + 1n + 2$ represents the number of nurses she needs for every operating room. Simplify the expression to show how many nurses Kimi needs per operating room.

_____

12 **ALLOWANCES** Angel gets an allowance of n dollars. Angie gets $3 more than Angel. Andy gets twice as much as Angie. The expression $n + (n + 3) + 2(n + 3)$ represents the total amount of the allowances. Simplify the expression. (Hint: Use the distributive property.)

_____

Write the vocabulary word that completes the sentence.

13 To _____ means to combine like terms.

14 A _____ is a quantity connected by plus or minus signs in an algebraic expression.

Lesson
3-4 Practice: Skills, Concepts, and Problem Solving

Write each expression after replacing the □ with 2. Evaluate.

1 $17 + □$ _____

2 $□ - 1$ _____

3 $74 ÷ □$ _____

4 $26 · □$ _____

5 $47 - □$ _____

6 $□ + 139$ _____

7 $□ · 56$ _____

8 $46 ÷ □$ _____

Evaluate each expression when $x = 8$, $y = 9$, and $z = 0$.

9 $x^2 + 3 - 10 + (y · z)^2$ _____

10 $5y - (x · 2) + 15 - z$ _____

11 $7z - 4 + (3 · y)$ _____

12 $20 - y + 5x + 6z$ _____

13 $(6 + y^2 + 12) · (y - x)$ _____

14 $15 + (x + y + z) + y · 10$ _____

15 $(y + 2)^2 + 4x - z$ _____

16 $4y ÷ 6 + 7z + x - (y - x)^2$ _____

Solve.

17 **MUSIC** Jade likes to burn songs onto CDs. A typical CD can hold _____ about 80 minutes of music. The expression $\dfrac{80}{m}$ represents how many minutes each song, m, can be to fit on the CD. Jade wants to put 20 songs on a CD. Evaluate the expression to determine how long each song can be.

18 **BAKING** Oya needs 10 minutes to set up, 40 minutes to bake, and _____ 20 minutes to clean up for each batch of bread. The expression $10b + 40b + 20b$ represents the time it takes for b batches of bread. Oya wants to make 5 batches of bread tomorrow. How many minutes will it take him?

Write the vocabulary word that completes the sentence.

19 A(n) _____ is a combination of numbers, variables, and operation symbols.

20 The _____ is a set of rules that tells what order to follow in evaluating an expression.

Math Triumphs

Lesson 4-1 **Practice: Skills, Concepts, and Problem Solving**

Write the operation in each sentence.

1 A number increased by 6 is 20. _____

2 Thirty divided into n equal groups is 6. _____

Who is correct?

3 The gym has a total of 32 basketballs. There are 7 less boys' basketballs than there are girls' basketballs. Write a system of equations that represents this situation.

Clark
$b + g = 32$
$g = b - 7$

Idra
$b + g = 32$
$b = g - 7$

_____

4 Six less than a number is twelve.

Fabi
$\frac{n}{6} = 12$

Odion
$6 - n = 12$

Marcus
$n - 6 = 12$

_____

Translate each sentence into an equation.

5 Nineteen less than w is 16. _____

6 Twelve divided by a number plus 2 is 6. _____

Solve.

7 **EQUATIONS** Seventy-one is 5 less than the product of 4 and a number. Write an equation to find the number, n. _____

▶ Vocabulary Check

Write the vocabulary word that completes each sentence.

8 The _____ of a number is the amount of the number.

9 An equation is different than an expression because an equation has an _____ sign.

Math Triumphs

Lesson 4-2 **Practice: Skills, Concepts, and Problem Solving**

Who Is Correct?

1 $f - 7 = 2$; if $f = 9$, show how to check the answer using inverse operations. Who is correct?

_____

Samantha
$f - 7 = 2$
$9 - 7 = 2,$
so $2 + 7 = 9$

Xavier
$f - 7 = 2$
$9 - 7 = 2$

Haji
$f - 7 = 2$
$f - 7 = 2 + 9$

2 $q + 3 = 19$; if $q = 16$, show how to check the answer using inverse operations. Who is correct?

_____

Sandra
$19 = q + 3$
$19 - 16 = 3$

Steve
$19 = q + 3$
$19 = 16 + 3,$
so $16 = 19 - 3$

Phong
$19 = q + 3$
$19 = 16 + 3$

Solve each equation.

3 $w + 18 = 24$

$w =$ _____

4 $h - 9 = 12$

$h =$ _____

Find four solutions of each equation. Show each solution in a table of ordered pairs.

5 $y = x - 1$

x	y = x − 1	y	(x, y)
−1	y = −1 − 1	−2	(−1, −2)
0			
1			
2			

6 $y = x + 2$

x	y = x + 2	y	(x, y)
−1	y = −1 + 2	1	(−1, 1)
0			
1			
2			

Solve.

7 **MOVIES** When showing this movie at the theater, the movie and trailer times add to a total of 132 minutes. Write and solve an equation to find m, the number of minutes of trailer time shown in the theater.

_____

LANGUAGES		English, French, Spanish
SUBTITLES		English, French, Spanish
Rating: PG	Full Screen	Approx. 125 minutes

▶ Vocabulary Check

Write the vocabulary word that completes each sentence.

8 A _____ is a letter or symbol used to represent an unknown quantity.

Math Triumphs

Lesson 4-3 **Practice: Skills, Concepts, and Problem Solving**

1 Solve four solutions of $y = 3x$ in a table of ordered pairs.

x	y = 3x	y	(x, y)
−1	y = 3(−1)	−3	(−1, −3)
0			
1			
2			

Who Is Correct?

2 Solve the equation $3x = 12$. Who is correct?

_____

Dinh
$3x = 12$
$3x \cdot 3 = 12 \cdot 3$
$x = 36$

Zoe
$3x = 12$
$3x \div 3 = 12 \div 3$
$x = 4$

Ashton
$3x = 12$
$3x - 3 = 12 - 3$
$x = 9$

3 Solve the equation $\frac{m}{3} = 6$. Who is correct?

_____

Bernie
$\frac{m}{3} = 6$
$\frac{m}{3} \times 3 = 6 \times 3$
$m = 18$

Mirel
$\frac{m}{3} = 6$
$\frac{m}{3} + 3 = 6 + 3$
$m = 9$

Reuben
$\frac{m}{3} = 6$
$\frac{m}{3} \div 3 = 6 \div 3$
$m = 2$

Solve each equation.

4 $\frac{w}{7} = 9$ $w = $ _____

5 $6f = 30$ $f = $ _____

Solve.

6 **PHOTO ALBUM** Dai is putting photos in an album. She wants to divide the pictures so that there are 7 photos on each two-page spread. There are 25 two-page spreads in the album. Write and solve and equation for p, the total number of photos Dai can put into the album.

_____

7 **GEOMETRY** The formula for the area of a rectangle is $A = bh$. Write and solve an equation to find h, the height of the rectangle.

_____

A = 180 ft²   h = ?

b = 15 ft

▶ **Vocabulary Review**

Write the property that completes each sentence.

8 The _____ states that multiplying the same amount to both sides of an equation keeps the equation balanced.

9 The _____ states that adding the same amount to both sides of an equation keeps the equation balanced.

Math Triumphs

Lesson 4-4 Practice: Skills, Concepts, and Problem Solving

Name the operations in order that should be used to solve each equation.

1 $6w + 5 = 25$

2 $\dfrac{x}{5} - 7 = 2$

Who Is Correct?

3 Solve the equation $2n - 5 = 21$.
Who is correct?

Husani	Kevin	Wendi
$2n - 5 = 21$	$2n - 5 = 21$	$2n - 5 = 21$
$2n - 5 + 5 = 21 + 5$	$2n - 5 - 5 = 21 - 5$	$2n - 5 + 5 = 21 + 5$
$2n = 26$	$2n = 16$	$2n = 26$
$2n/2 = 26/2$	$2n/2 = 16/2$	$2n - 2 = 26 - 2$
$n = 13$	$n = 24$	$n = 24$

Solve each equation.

4 $\dfrac{w}{2} - 1 = 4$

$w =$ _____

5 $\dfrac{x}{5} + 3 = 7$

$x =$ _____

6 $2n + 3 = 25$

$n =$ _____

7 $3t - 4 = 5$

$t =$ _____

8 $\dfrac{p}{7} + 4 = 6$

$p =$ _____

9 $4y - 13 = 15$

$y =$ _____

Solve.

10 **CANDY** Ralph sold candy bars for $2 each as part of a school fund-raiser. Ralph also collected $150 in donations. He collected a total of $498. Write and solve an equation to find c, the number of candy bars Ralph sold.

_____

11 **EARNINGS** Nora was paid for a baby-sitting job. She divided the money evenly into her Spending, Saving, and Giving bank accounts. The savings section started with $11 and had a total of $18 after Nora was paid. Write and solve an equation to find p, the amount of money Nora was paid.

_____

▶ **Vocabulary Review**

Write the vocabulary term that completes the sentence.

12 The _____ is a pair of numbers that when added has a sum of zero.

Math Triumphs

Lesson 4-5 **Practice: Skills, Concepts, and Problem Solving**

Write each fraction as a decimal.

1. $\dfrac{3}{4}$ = _____

2. $\dfrac{7}{10}$ = _____

3. $\dfrac{15}{10}$ = _____

4. $\dfrac{2}{5}$ = _____

5. $\dfrac{5}{2}$ = _____

6. $\dfrac{4}{8}$ = _____

Write each fraction as a percent.

7. $\dfrac{3}{8}$ _____

8. $\dfrac{3}{25}$ _____

9. $\dfrac{1}{8}$ _____

10. $\dfrac{4}{2}$ _____

11. $\dfrac{3}{6}$ _____

12. $\dfrac{4}{16}$ _____

Solve.

13. **FRUIT** Derrick bought a total of 6.5 pounds of produce from the grocery store. He bought $3\dfrac{1}{5}$ pounds of bananas. He also bought equal amounts of apples and oranges to account for the rest of the weight. How many pounds of oranges did Derrick buy?

_____

14. **ENGINEERING** Maya is designing a pump to deliver fluid to 3 pipes. The pump will produce 7.62 gallons of fluid per minute. One line will move 4.35 gallons per minute and another will move 2.11 gallons per minute. How much liquid will the third line move?

_____

▶ **Vocabulary Check**

Write the property that completes the sentence.

15. A _____ is a number that represents whole numbers and fractions.

16. To _____ means to find the product of the numerator of one fraction and the denominator of the other fraction.

Math Triumphs

Lesson
5-1 **Practice: Skills, Concepts, and Problem Solving**

Write the symbol that should be used for each inequality.

1 A number divided by 3 is not equal to 7.

_____

2 Three times a number is greater than or equal to 12. _____

3 Six is greater than a number. _____

4 The product of a number and 2 plus 4 is less than 20. _____

Who is Correct?

5 A class is asked to write an inequality for the following sentence.

A number plus 2 is at most 19. Who is correct? _____

Joe	Kisa	Delana
$n + 2 \geq 19$	$n + 2 \leq 19$	$n + 2 < 19$

6 A class is asked to write an inequality for the following sentence. The quotient of a number and 3 minus 8 is greater than 1. Who is correct?

_____

Shawn	Enzi	Marisa
$\frac{n}{3} - 8 \geq 1$	$3n - 8 > 1$	$\frac{n}{3} - 8 > 1$

Translate each sentence to an inequality.

7 A number minus 7 is less than or equal to 1. _____

8 Seven times a number plus 4 is not equal to 11. _____

9 The sum of a number and 3 is greater than or equal to 8. _____

10 A number divided by 2 plus 6 is more than 10. _____

Solve.

11 **EARNINGS** Tevvy made three times more money baby-sitting this month than her best friend, Oline. Tevvy made less than $100. Write an inequality to find m, the amount of money Oline made.

_____

Chapter 5

Lesson 5-2 **Practice: Skills, Concepts, and Problem Solving**

Write the operation that should be used to solve each inequality.

1 $t - 6 \le 4$ _____

2 $b + 8 > 15$ _____

Who is Correct?

3 Solve the inequality $y - 2 \le 5$. Who is correct?

_____

Austin	Nasim	Tess
$y - 2 \le 5$	$y - 2 \le 5$	$y - 2 \le 5$
$y - 2 + 2 \le 5$	$y - 2 - 2 \le 5 - 2$	$y - 2 + 2 \le 5 + 2$
$y \le 5$	$y \le 3$	$y \le 7$

4 Solve the inequality $9 > m + 4$. Who is correct?

_____

Alvaro	Avery	Kayla
$9 > m + 4$	$9 > m + 4$	$9 > m + 4$
$9 - 4 > m + 4 - 4$	$9 + 4 > m$	$9 > m + 4 - 4$
$5 > m$	$13 > m$	$9 > m$

Solve.

5 $f + 9 \ge 12$

$f \ge$ _____

6 $k - 8 > 0$

$k >$ _____

7 $2 \le x - 9$

_____ $\le x$

8 $15 > h + 3$

_____ $> h$

9 $s - 3 \ge 10$

$s \ge$ _____

10 $x + 2 < 11$

$x <$ _____

Solve.

11 **FIELD TRIP** Margo is organizing a trip to the museum. There are currently 18 people planning to go. Write and solve an inequality to find n, the number of additional people needed so that Margo can get the group rate.

_____

Write the vocabulary word that completes the sentence.

12 A _____ is a letter or symbol used to represent an unknown quantity.

Chapter 5

Lesson
5-3 Practice: Skills, Concepts, and Problem Solving

Write the operation that should be used to solve each inequality.

1 $7d \leq 70$ _____

2 $6y > 6$ _____

3 $\dfrac{n}{5} < 30$ _____

4 $\dfrac{r}{9} < 6$ _____

Who is Correct?

5 Solve the inequality $\dfrac{y}{7} < 5$. Who is correct? _____

Ming	Sheryl	Ethan
$\frac{y}{7} < 5$	$\frac{y}{7} < 5$	$\frac{y}{7} < 5$
$\frac{y}{7} \cdot 7 < 5 \cdot 7$	$\frac{y}{7} \cdot 5 < 5 \cdot 5$	$\frac{y}{7} + 7 < 5 + 7$
$y < 35$	$y < 25$	$y < 12$

Solve.

6 $9r > 18$

$r >$ _____

7 $\dfrac{q}{10} > 2$

$q >$ _____

8 $\dfrac{p}{4} \geq 36$

$p \geq$ _____

9 $6q < 42$

$q <$ _____

Solve.

10 **GOLF** A sleeve of golf balls costs at least $9.
Write and solve an inequality to find b, the
cost of one golf ball.

_____

3 Golf Balls

Write the words that complete the sentence.

11 The symbol $\geq$ means _____ than or _____ to.

12 _____ operations are operations that undo each other.

Chapter 5

Lesson 5-4 **Practice: Skills, Concepts, and Problem Solving**

Write the operations in the order that should be used to solve each inequality.

1 $\dfrac{x}{6} + 3 < 9$ _____

2 $1 > 4n - 7$ _____

Who is Correct?

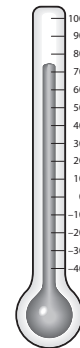**3** Solve the inequality $6f + 5 < 41$. Who is correct?

_____

Hoa	Esther	Frank
$6f + 5 < 41$	$6f + 5 < 41$	$6f + 5 < 41$
$6f + 5 - 41 < 41 - 41$	$6f + 5 + 5 < 41 + 5$	$6f + 5 - 5 < 41 - 5$
$6f < 5$	$6f < 46$	$6f < 36$
$6f \cdot 6 < 5 \cdot 6$	$6f - 6 < 46 - 6$	$\dfrac{6f}{6} < \dfrac{6}{6}$
$f < 30$	$f < 40$	$f < 6$

Solve.

4 $\dfrac{w}{4} - 1 \le 3$

$w \le$ _____

5 $8x - 11 \ge 45$

$x \ge$ _____

6 $\dfrac{c}{3} + 5 > 7$

$c >$ _____

7 $13 < 7 + \dfrac{h}{2}$

_____ $< h$

8 $58 \le 5b - 2$

_____ $\le b$

9 $6y + 4 > 4$

$y >$ _____

Solve.

10 **TEMPERATURE** The temperature is increasing $2°$ Fahrenheit each hour. Write and solve an inequality to find h, the number of hours that will have passed until the temperature is greater than or equal to $90°$ Fahrenheit.
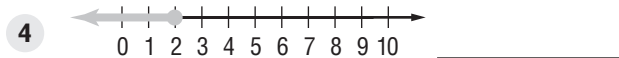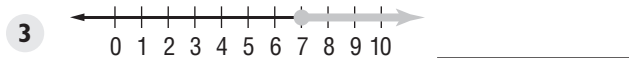
_____

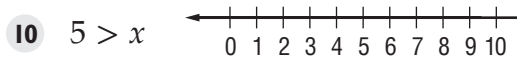**Write the vocabulary word that completes the sentence.**

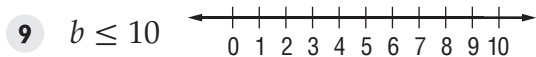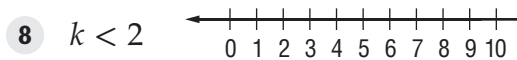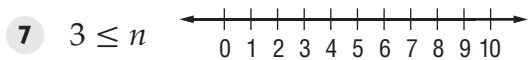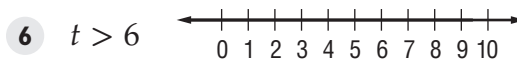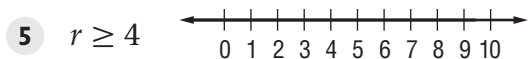**11** An _____ is a number sentence that uses $<$ (less than), $>$ (greater than), $\le$ (less than or equal to), $\ge$ (greater than or equal to), or $\ne$ (not equal to) to compare two unequal expressions.

Chapter 5

Math Triumphs

Lesson 5-5 Practice: Skills, Concepts, and Problem Solving

Write an inequality for each graph.

1 0 1 2 3 4 5 6 7 8 9 10 _____

2 0 1 2 3 4 5 6 7 8 9 10 _____

3 0 1 2 3 4 5 6 7 8 9 10 _____

4 0 1 2 3 4 5 6 7 8 9 10 _____

Graph each inequality.

5 $r \geq 4$ 0 1 2 3 4 5 6 7 8 9 10

6 $t > 6$ 0 1 2 3 4 5 6 7 8 9 10

7 $3 \leq n$ 0 1 2 3 4 5 6 7 8 9 10

8 $k < 2$ 0 1 2 3 4 5 6 7 8 9 10

9 $b \leq 10$ 0 1 2 3 4 5 6 7 8 9 10

10 $5 > x$ 0 1 2 3 4 5 6 7 8 9 10

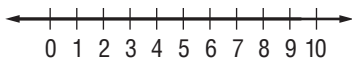**Solve.**

11 **MUSIC**   Sigmund is planning to purchase some CDs and records at a music sale. During the sale, all CDs are $9 and all records are $14. Sigmund wants to spend at most $50. He decides to buy one record and the rest he spends on CDs. Write and solve an inequality to find n, the number of CDs that Sigmund purchases. Graph the solution on a number line.

_____

_____

0 1 2 3 4 5 6 7 8 9 10

Write the vocabulary word that completes the sentence.

12 _____ operations are used to _____ for a variable in linear inequalities.

Chapter 5