

Name _____ Date _____

"Percent and Proportion Review"

1. Sanaa has 4 days to travel 840 miles. She wants to complete about 80% of the trip by the start of day 4. Which of the following is the closest to the distance she should drive on each of the first three days?
 - a) 672 miles
 - b) 224 miles
 - c) 168 miles
 - d) 420 miles

2. Aubrey is building a 1,500 square feet home. Her contractor asks her to pay a little more money and he will increase the square footage by 12%. Aubrey agrees to pay the extra money. What will the new square footage of the home be?
 - a) 1,815 sq ft
 - b) 1,320 sq ft
 - c) 1,680 sq ft
 - d) 2,820 sq ft

3. A big screen TV normally sells for \$569.98. It is now on sale for 33% off. As an employee, Crissan is able to save an extra 15% off the sale price. How much, to the nearest dollar, would Crissan need to pay for the TV?
 - a) \$325
 - b) \$382
 - c) \$57
 - d) \$188

4. Today, Torren's lunch cost \$11.50 and he left a \$1.61 tip. Tomorrow, Torren wants to buy the meal that cost \$13.25. If he wants to leave the same tip rate that he left today, how much of a tip will Torren leave?
 - a) \$1.93
 - b) \$1.75
 - c) \$1.86
 - d) \$1.52

5. Mikalia deposits \$100 into a new savings account.
 - The account earns 5.9% simple interest per year.
 - No money is added or removed from the savings account for 3 years.

What is the total amount of money in her savings account at the end of the 3 years?

 - a) \$17.70
 - b) \$159.00
 - c) \$277.00
 - d) \$117.70

6. Tye wants to save money on a switch. At the store, the switch costs \$349.00.
- On Monday, the store will have a sale and discount the switch by 25%.
 - Anyone who buys the switch before 10am will also get an additional 15% off the sales price.

How much will Tye pay, without tax, when he buys the switch on Monday before 10am?(round to the nearest dollar)

- a) \$222 b) \$87
b) \$262 d) \$140

7. Ra-Leek is making bread dough.
- The recipe requires $\frac{3}{4}$ cup of flour and $1\frac{1}{8}$ teaspoons of salt.
 - Ra-Leek wants to make the recipe using 1 cup of flour

To maintain the ratio, how much salt is required when 1 cup of flour is used?

- a) $\frac{27}{32}$ c) $1\frac{1}{2}$
b) $\frac{2}{3}$ d) $1\frac{7}{8}$

8. The table below shows the number of scooters sold at a store during a three-year period.

SCOOTER SALES

Year	Number Sold
Year 1	725
Year 2	579
Year 3	696

In Year 4, the store sold 112% of the total number of scooters sold during the previous three years combined. Determine the number of scooters sold in Year 4.

9. The table shows the relationship between x , the amount of time in hours, and y , the distance traveled in miles, by a probe before it reaches Mars.

Time (h)	2	4	6
Distance (m)	24,000	48,000	72,000

Does the table represent a proportional relationship? Why or why not?

Determine the number of miles the probe travels in 5.5 hours.

Answer _____

10. D'naiya used a sensor to measure the speed of a moving car at different times. At each time, the sensor measured the speed of the car in both miles per hour and kilometers per hour. The table below shows her results.

RECORDED SPEEDS

Speed (miles per hour)	Speed (kilometers per hour)
11.0	17.699
26.0	41.834
34.0	54.706

Based on her results, which statement describes the relationship between m , the speed of the car in miles per hour, and k , the speed of the car in kilometers per hour?

- a) The relationship is proportional because the ratio of m to k is constant
- b) The relationship is not proportional because the ratio of m to k is constant
- c) The relationship is proportional because the difference between m and k is constant
- d) The relationship is not proportional because the difference between m and k is constant

11. George is dividing a side of meat into 4 equal-sized pieces. If each piece weighs 9.3 pounds and there is 1.9 pounds of meat left over, how much did the piece of meat weigh?

- a) 37.2 pounds
- b) 16.9 pounds
- c) 39.1 pounds
- d) 35.3 pounds

12. Coach Nathan ordered sweat suits for the football team from two different suppliers. One supplier charge's \$28 for each sweat suit plus a 7% shipping charge. The other supplier charges \$34 for each sweat suit plus 5% shipping charge.

- a) Coach Nathan ordered the same number of sweat suits from each supplier. Write two expressions to represent the shipping charges he paid to both supplies. Use x to represent the number of sweat suits ordered.

Expressions _____

- b) The first supplier gave Coach Nathan a discount of 10% off of his order total. The second supplier gave him a discount of \$20 off of his order total. Write two equations to represent the total costs he paid to each supplier. Use x to represent the number of sweat suits he ordered.

Equation _____

- c) Coach Nathan ordered 27 sweat suits from each supplier. How much did he pay?

Answer _____

13. Shannon is planning a seventh grade field trip to an amusement park. School policy requires a minimum of 1 adult as chaperone for every 7 scholars on the trip and allows a food budget of \$8 per person. Group pricing at the amusement park is \$14.50 per scholar and \$21 per adult. There is also a bus parking fee that is 6% of the total ticket price.

- a) There are 107 scholars in the seventh grade. How much money does Shannon need to budget for the amusement park tickets and parking?**

Answer _____

- b) What is the total budget for tickets, parking, and food for all scholars and chaperones to go on the field trip?**

Answer _____

Name: _____

Date: _____

STANDARD 7.NS.1a Quiz

1. Which of the following situations involve opposite quantities combining to make 0? [DOK 1]

- (A) Stella has a new piggy bank. She adds 3 quarters on Tuesday, and then adds another 3 quarters on Thursday.
- (B) Devon opens a new checking account with \$30. His first purchase, made with his new debit card, totals \$28.
- (C) Joe makes $1\frac{1}{2}$ liters of lemonade and drinks it all during the afternoon.
- (D) Brittany is writing a novel. She wrote 4 new pages to finish Chapter 1. When she reviews Chapter 1, she discards these 4 pages and an additional 4 pages.

2. Which situations can be represented by the expression $-75 + 75$?

Select all the correct answers. [DOK 2]

- (A) Last night Sarah read 75 fewer pages than the night before. She reads 75 pages tonight.
- (B) A diver is 75 feet below the surface of the water and then comes up to the surface.
- (C) Peter adds 75 millimeters of water to a test tube containing 75 millimeters.
- (D) Amber owes the phone company \$75 and she pays them \$75.

3. Which statements below are true for all values of x ?

Select all the correct answers. [DOK 3]

- (A) If the distance from 0 to x on a number line is equal to 2, then $-2 + x = 0$.
- (B) If the distance from 0 to x on a number line is less than 2, then $-2 + x$ is negative.
- (C) If the distance from 0 to x on a number line is greater than 2, then $-2 + x$ is positive.
- (D) If the distance from 0 to x on a number line is greater than 0, then $-2 + x$ is positive.

Name: _____

Date: _____

STANDARD 7.NS.2a QUIZ #2

1. A clogged bathtub drains at a constant rate. The amount of water in the bathtub changes by -3.75 gallons in one hour. What is the change in the amount of water in the bathtub after $\frac{1}{3}$ of an hour? [DOK 2]

- (A) -1.25 gallons
- (B) -2.25 gallons
- (C) -6.25 gallons
- (D) -11.25 gallons

2. The table shows yesterday's change in value of four different stocks.

Stock	Change in Value
A	-\$1.25
B	-\$0.50
C	-\$1.50
D	-\$0.25

Which of the following statements are true?

Select **all** the correct answers. [DOK 2]

- (A) The change in value of Stock A is 5 times as much as the change in value of Stock D.
- (B) The change in value of Stock B is 4 times as much as the change in value of Stock A.
- (C) The change in value of Stock C is 3 times as much as the change in value of Stock B.
- (D) The change in value of Stock D is 2 times as much as the change in value of Stock B.

7th Grade Math Weekly Quiz

3. Evaluate the expression below. [DOK 2]

$$4 \times \frac{1}{3} \times (-8) \times 9 \times \left(-\frac{1}{2}\right)$$

- (A) -48
- (B) 48
- (C) 1,728
- (D) -1,728

4. Which of the following products is negative? [DOK 1]

- (A) $6\frac{1}{2} \cdot 4\frac{1}{4}$
- (B) $-3\left(-2\frac{4}{5}\right)$
- (C) $\left(-5\frac{1}{2}\right)\left(-\frac{1}{4}\right)$
- (D) $-3\frac{3}{4} \times \frac{5}{6}$

5. Victoria needs sugar for a certain recipe. The original recipe calls for $\frac{2}{3}$ cup sugar. However, Victoria wants to make a recipe that is $3\frac{1}{2}$ times larger. [DOK 2]

Enter your response in the box.

Name: _____

Date: _____

Standard 7.NS.3 Quiz

- On Monday, the temperature at 10am at Sam's house was -6° Fahrenheit. The temperature at 2pm at Sam's house was 2° Fahrenheit. Which statement about the change in temperature from 10am to 2pm at Sam's house is true?
 - The temperature decreased by 12° Fahrenheit.
 - The temperature decreased by 4° Fahrenheit.
 - The temperature increased by 3° Fahrenheit.
 - The temperature increased by 8° Fahrenheit.

- The width of a rectangle is $6\frac{2}{3}$ inches. The length of the rectangle is twice its width. What is the perimeter of the rectangle?
 - 20 inches
 - 40 inches
 - $30\frac{2}{3}$ inches
 - $88\frac{8}{9}$ inches

- Travis, Jessica, and Robin are collecting donations for the school band. Travis wants to collect 20% more than Jessica, and Robin wants to collect 35% more than Travis. If the students meet their goals and Travis collects \$43, how much money did they collect in all?
 - \$106.78
 - \$128.60
 - \$136.88
 - \$144.99

4. The total change in the daily high temperature from Monday to Saturday in one week in Columbus was -15°F . Complete the table to show possible temperature changes for Tuesday and Thursday.

Day	Change in Daily High Temperature ($^{\circ}\text{F}$)
Monday	+7
Tuesday	
Wednesday	-12
Thursday	
Friday	+2
Saturday	+1
Total	-15

5. Kenny made pillows to sell at a fair.

- He paid \$175.96 for supplies
- He charged \$8.75 for each pillow he sold.

Kenny sold 27 pillows at the fair. What was Kenny's profit in dollars? *Show your work.*

Answer: _____

Name _____ Date _____

"Probability & Statistics / Geometry Review"

1. Stephan has 1 green pen, 1 orange pen, and 1 yellow pen in his desk. If he randomly takes two to them from his desk without replacement, what is the probability that he will take the orange and yellow pens?

- a) $\frac{1}{3}$ c) $\frac{1}{9}$
b) $\frac{1}{12}$ d) $\frac{1}{6}$

2. Courtney has some state quarters in her pocket. She collects the following data by randomly pulling one quarter, recording the state, and then replacing it.

Delaware	South Carolina	Delaware	Delaware	Maryland
South Carolina	Delaware	Virginia	South Carolina	Maryland
Virginia	Delaware	Delaware	South Carolina	Virginia
Delaware	Virginia	Maryland	Maryland	Delaware

Which is the best estimate of the number of times Amber would pull out a Delaware quarter if she pulled out a quarter another 300 times?

- a) 180 c) 120
b) 60 d) 90

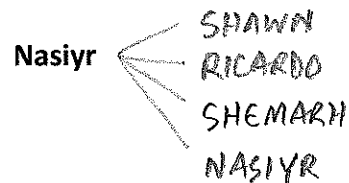
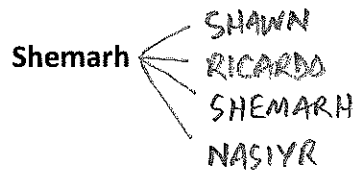
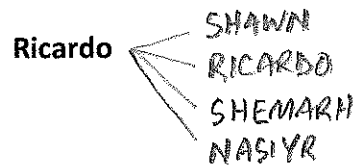
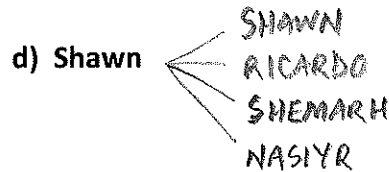
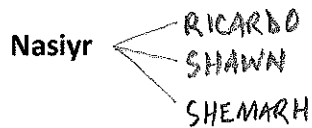
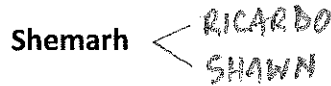
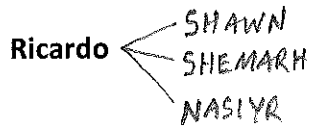
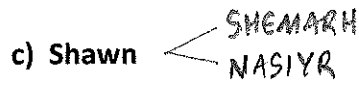
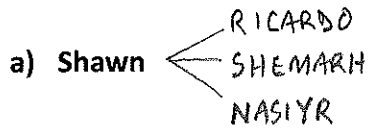
3. Kennedy is rolling a 6-sided number cube and flipping a coin. What is the probability that the cube will land on 4 and the coin will land heads up?

- a) $\frac{1}{6}$ c) $\frac{1}{2}$
b) $\frac{2}{3}$ d) $\frac{1}{12}$

4. A traffic device monitors and records a sample of the type of vehicles that cross a bridge. The machine counts 15 SUV's, 13 Tractor Trailers, and 72 cars. Which fractions correctly express the probability of the type of vehicles that crossed the bridge?

- a) $\frac{15}{100}, \frac{13}{100}, \frac{72}{100}$ c) $\frac{1}{15}, \frac{1}{13}, \frac{1}{72}$
b) $\frac{3}{20}, \frac{13}{100}, \frac{18}{25}$ d) $\frac{20}{3}, \frac{100}{13}, \frac{25}{18}$

5. Ricardo, Shawn, Shemarh, and Nasiyr are the 4 finalists in the school math tournament. The math tournament is designed so that there will be no ties. Which tee diagrams shows the ways that the scholars can finish first and second in the math tournament?



6. Aliyah learned that about 10% of people are left-handed. She ran 10 different simulations using random digits to find the probability that there is a left-handed person in a group of 5 randomly selected people. In the table below, 0 represents a left-handed person and 1 through 9 represent a right-handed person. Each column represents one simulation of 5 people.

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

Based on Aliyah's simulations, what is the probability that in a group of 5 people, at least 1 person will be left-handed?

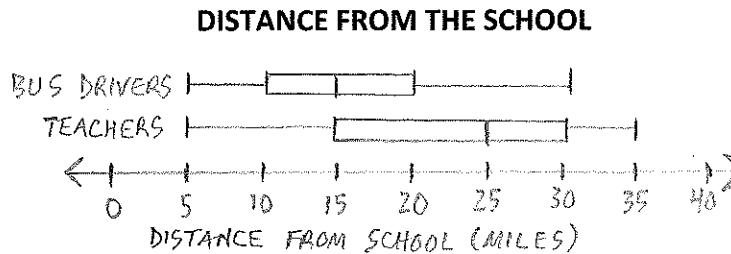
- a) 6%
 - b) 3%
 - c) 60%
 - d) 30%
7. Kayla gathered data on the ages of 15 parents of scholars in her school. She collected the data and listed it in the table below.

30	36	32	51	31
54	42	56	32	43
28	26	43	38	43

Which is the best prediction that Kayla can make about the ages of the parents at her school?

- a) At least half the parents are over 45 years old
 - b) There are not any parents older than 54
 - c) The mean age is about 39
 - d) Most parents are about 43 years old
8. A circular shape has a diameter of 8 units. What is the approximate circumference of the circular shape?
- a) 29.1 units
 - b) 20.1 units
 - c) 25.1 units
 - d) 15.1 units

13. A principal gathered data about the distance, in miles, that his teachers and bus drivers live from the school. The box plots below show these data.



Based on the box plots, which statement is true?

- The interquartile range of the distance for the bus drivers is twice the interquartile range of the distance for the teachers.
 - The range of the distance for the teachers is twice the range of the distance for the bus drivers.
 - The interquartile range of the distance for the bus drivers is 5 miles less than the interquartile range of the distance for the teachers.
 - The range of the distances for the teachers is 5 miles less than the range of the distance for the bus drivers.
14. A spinner with seven equal-sized sections was used to play a game.
- It was used 250 times in the first game
 - Of those 250, the arrow landed on section 7 a total of 35 times
 - The same spinner was used 150 times in the second game

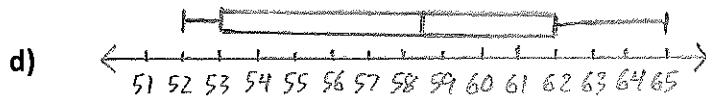
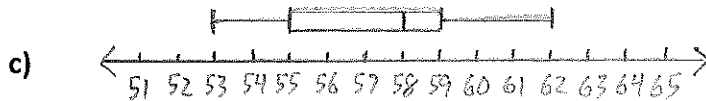
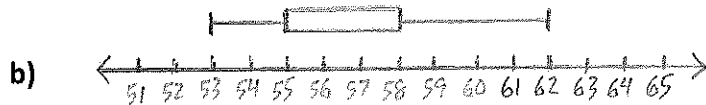
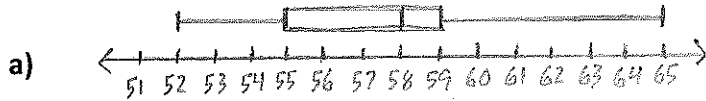
How many times did the spinner most likely land on section 7 in the second game?

- | | |
|-------|-------|
| a) 14 | c) 30 |
| b) 21 | d) 35 |

15. Alicia surveyed 13 students in her class about their heights in inches. Her data are listed below.

52, 53, 55, 55, 56, 57, 58, 58, 59, 59, 59, 62, 65

Which box plot correctly displays her data?



16. A computer program selects blue, red, or green as the background color each time the program is used.

- The program was used 45 times on the same computer in one week
- Of those 45 times, a blue background appeared 12 times and a red background appeared 21 times

Based on this information, which statement about the likelihood of the green background appearing the next time the program is used is true?

- Green is just as likely as red or blue to appear
- Green is just as likely as blue to appear, but not as likely as red
- Green is not as likely as red or blue to appear
- Green is not as likely as blue to appear, but is as likely as red

17. Which number represents the probability of an event that is very likely to occur?

a) 0.12

c) 0.89

b) 1.3

d) 0.09

18. The rectangular floor of a classroom is 36 feet in length and 32 feet in width. A scale drawing of the floor has a length of 9 inches. What is the area, in square inches, of the floor in the scale drawing? (SHOW YOUR WORK)

Answer _____

LESSON
6-4**Solving Two-Step Equations****Reteach**

Here is a key to solving an equation.

Example: Solve $3x - 7 = 8$.

Step 1:

- Describe how to form the expression $3x - 7$ from the variable x :
- Multiply by 3. Then subtract 7.

Step 2:

- Write the parts of Step 1 in the reverse order and use inverse operations:
- Add 7. Then divide by 3.

Step 3:

- Apply Step 2 to *both sides* of the original equation.
- Start with the original equation. $3x - 7 = 8$
- Add 7 to both sides. $3x = 15$
- Divide both sides by 3. $x = 5$

Describe the steps to solve each equation. Then solve the equation.

1. $4x + 11 = 19$

2. $-3y + 10 = -14$

3. $\frac{r - 11}{3} = -7$

4. $5 - 2p = 11$

5. $\frac{2}{3}z + 1 = 13$

6. $\frac{w - 17}{9} = 2$

LESSON
6-4

Solving Two-Step Equations

Reading Strategies: Analyze Information

An equation such as $-3x + 7 = -5$ is called a *two-step equation* because:

It takes two steps to form *the expression* $-3x + 7$.

It also takes two steps to solve *the equation* $-3x + 7 = -5$.

To form the expression $-3x + 7$ from x : Step 1. Multiply x by -3 .
Step 2. Add 7.

To solve the equation $-3x + 7 = -5$: Step A. Subtract 7 from both sides.
Step B. Divide both sides by -3 .

Look at the two pairs of steps. To find Step A and Step B, reverse the order of Step 1 and Step 2 and use inverse operations.

Before you solve each the equation, list each pair of steps.

1. to form $-2x - 3$ from x : _____

to solve $-2x - 3 = -25$: _____

The solution to the equation $-2x - 3 = -25$ is: _____

2. to form $\frac{x+1}{3}$ from x : _____

to solve $\frac{x+1}{3} = -5$: _____

The solution to the equation $\frac{x+1}{3} = -5$ is: _____

3. to form $5 - 4x$ from x : _____

to solve $5 - 4x = 17$: _____

The solution to the equation $5 - 4x = 17$ is: _____

4. to form $\frac{1}{3}(x - 7)$ from x : _____

to solve $\frac{1}{3}(x - 7) = 1$: _____

The solution to the equation $\frac{1}{3}(x - 7) = 1$ is: _____

LESSON
6-4**Solving Two-Step Equations****Practice and Problem Solving: D**

Tell how to solve each two-step equation. Then solve it. The first one is done for you.

1. $5x + 3 = 33$

Subtract 3 from both sides; $5x = 30$. Then divide both sides by 5; $x = 6$.

2. $8y - 1 = 31$

3. $\frac{1}{2}z + 5 = 11$

4. $15 - 4t = 3$

5. $\frac{1}{3}(q + 3) = 5$

Solve. Check each answer.

6. $2m + 7 = 9$

7. $3p - 5 = 19$

Write an equation to represent the problem. Then solve the problem. The first one is done for you.

8. When 3 is subtracted from two times a number, the result is 17. What is the number?

$2n - 3 = 17; n = 10$

9. The sum of half a number and 5 is 9. What is the number?

10. The sum of 15 and two times a number is 29. What is the number?

LESSON

6-4

Solving Two-Step Equations**Practice and Problem Solving: A/B**

Solve each equation. Cross out each number in the box that matches a solution.

-18	-8	-6	-4	-3	-2	2	3	4	6	8	18
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1. $5x + 8 = 23$

2. $-2p - 4 = 2$

3. $6a - 11 = 13$

4. $4n + 12 = 4$

5. $9g + 2 = 20$

6. $\frac{k}{6} + 8 = 5$

7. $\frac{s}{3} - 4 = 2$

8. $\frac{c}{2} + 5 = 1$

9. $9 + \frac{a}{6} = 8$

Solve. Check each answer.

10. $3v - 12 = 15$

11. $8 + 5x = -2$

12. $\frac{d}{4} - 9 = -3$

Write an equation to represent the problem. Then solve the equation.

13. Two years of local Internet service costs \$685, including the installation fee of \$85. What is the monthly fee?

14. The sum of two consecutive numbers is 73. What are the numbers?

Name: _____

Date: _____

Standard 7.RP.3 Quiz #2

1. The original price of a sweater was \$80. The store is having a 20% off sale. What is the sale price of the sweater?

A \$64

C \$16

B \$78.40

D \$96

2. A savings account earns 8% simple interest per year. What was the principal if \$336 was earned after 6 years?

A \$700

C \$161.28

B \$70

D \$1,036

7 Math Weekly Quiz

3. Yesterday, Molly's lunch cost \$9.80, and she left a \$1.47 tip. Today, Molly's lunch costs \$12.60. If Molly wants to tip at the same rate today that she did yesterday, how much of a tip should Molly leave?

- A \$1.14
- B \$1.47
- C \$1.89
- D \$4.27

4. Lianna and Andy each opened a savings account with a deposit of \$100.

- Lianna earned 3.5% simple interest per year.
- Andy earned 3% simple interest per year.
- Neither of them made additional deposits or withdrawals.

How much more did Lianna receive in interest than Andy after three years?

- | | |
|----------|-----------|
| A \$0.50 | C \$15.00 |
| B \$5.00 | D \$1.50 |

7 Math Weekly Quiz

5. Austin has a coupon for 15% off the price of a computer. The sales tax is 8%.

Part A

Austin purchases a computer with a regular price of \$495. How much will he pay, including sales tax, if he uses his coupon?

Answer:

Part B

How much money did Austin save, including sales tax, by using his coupon?

Answer:

MODULE
4

Rates and Proportionality

Module Quiz: B

1. A machine paints 340 toy boats in 45 minutes. Which expression equals the unit rate per hour?

A $\frac{3}{4}$ C $\frac{340}{3}$
 B $\frac{45}{340}$ D $\frac{340}{45}$

2. Which speed is the fastest?

- A 18 feet in 20 minutes
 B 90 feet in 2.5 hours
 C 20 yards in 1.5 hours
 D $3\frac{2}{3}$ yards in 15 minutes

3. What is the unit price for a piece of cheese if 1.24 pounds costs \$11.25?

- A \$0.11 per lb
 B \$9.07 per lb
 C \$12.49 per lb
 D \$13.95 per lb

4. Which table shows a constant rate of change?

A

Days	6	12	18
Earnings (\$)	225	450	750

B

Days	6	12	18
Earnings (\$)	225	500	750

C

Days	6	12	20
Earnings (\$)	225	450	675

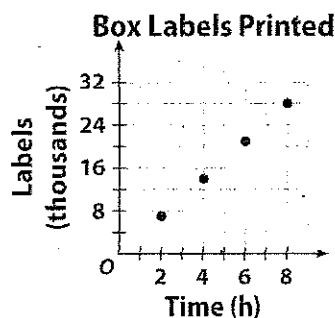
D

Days	6	12	20
Earnings (\$)	225	450	750

5. A student spends the same amount each week for bus fare. In 5 weeks, he spends \$115. Which equation shows this relationship? Let x = number of weeks.

- A $y = 3.22x$
 B $y = 5x$
 C $y = 23x$
 D $y = 115x$

Use the graph for 6–7.



6. Draw a line through the points. Why does this line show a proportional relationship?

- A It is not curved.
 B It is a vertical line.
 C It connects all the dots.
 D It goes through the origin.

7. What is the constant of proportionality for the relationship on the graph?

- A 3.5 C 8
 B 7 D 28

8. If a is an integer, when is $\frac{a}{b}$ always equal to an integer?

- A $b = 0$ C $b > 1$
 B $b < 1$ D $b = 1$ or -1

Chapter 5

Quiz

For use after Section 5.3

Write the ratio as a fraction in simplest form.

1. 24 messages : 10 messages 2. 5 meters to 20 meters

Use the ratio table to find the unit rate with the specified units.

3. miles per gallon

Gallons	0	2	4	6
Miles	0	31	62	93

4. cost per box

Boxes	3	6	9
Cost	\$3.60	\$7.20	\$10.80

Tell whether the ratios form a proportion.

5. $\frac{4}{7}, \frac{24}{35}$ 6. $\frac{11}{12}, \frac{33}{36}$

Tell whether the two rates form a proportion.

7. 25 cars in 5 days; 60 cars in 12 days
8. 14 books in 2 boxes; 20 books in 3 boxes

Use the table to write a proportion.

9.

	Cashews	Peanuts
Dollars	12	16
Pounds	3	p

10.

	Monday	Tuesday
Emails	e	30
Hours	8	10

Solve the proportion.

11. $\frac{x}{10} = \frac{4}{5}$ 12. $\frac{8}{9} = \frac{p}{81}$

13. The number of pictures your printer can print are shown in the table. Find the rate in pictures per minute.

Minutes	2	4	6	8
Pictures	16	32	48	64

14. On Monday, you swim 12 laps in 30 minutes. On Tuesday, you swim 15 laps in 45 minutes. Are these rates proportional? Explain.
15. A chemical compound requires 8 ounces of Chemical A and 12 ounces of Chemical B. A mixture contains 24 ounces of Chemical A and 30 ounces of Chemical B. How can you fix the mixture to make the chemical compound?
16. In an animal shelter, the ratio of dogs to cats is 5 to 3. There are 25 dogs. Write and solve a proportion to find the number c of cats.

Answers

1. _____
2. _____
3. _____
4. _____
5. _____
6. _____
7. _____
8. _____
9. _____
10. _____
11. _____
12. _____
13. _____
14. _____
15. _____
16. _____

5.2**Practice**

For use after Lesson 5.2

Tell whether the ratios form a proportion.

1. $\frac{1}{5}, \frac{5}{15}$

2. $\frac{2}{3}, \frac{12}{18}$

3. $\frac{15}{2}, \frac{4}{30}$

4. $\frac{56}{21}, \frac{8}{3}$

5. $\frac{5}{8}, \frac{62.5}{100}$

6. $\frac{17}{20}, \frac{90.1}{106}$

7. $\frac{3.2}{4}, \frac{16}{24}$

8. $\frac{34}{50}, \frac{6.8}{10}$

Tell whether the two rates form a proportion.

9. 28 points in 3 games;
112 points in 12 games

10. 32 notes in 4 measures;
12 notes in 2 measures

11. You can type 105 words in two minutes. Your friend can type 210 words in four minutes. Are these rates proportional? Explain.

Name: _____

Date: _____

Standard 7.RP.1

1. There are 72 dogs and 60 cats at the animal shelter. What is the ratio of dogs to cats?

A 6 : 5	C 60 : 72
B 7 : 6	D 72 : 60

2. Norah and Eli travel 183 miles in 3 hours. Find the unit rate.

A 180 miles per hour	C 61 miles per hour
B 0.02 miles per hour	D 183 miles per 3 hours

3. At 2:00PM, 26 songs have downloaded to your iPod. At 4:00PM, 188 songs have downloaded to your iPod. What is the download rate per hour?

A 81 songs per hour	C 162 songs per hour
B 94 songs per hour	D 26 songs per hour

Name _____ Date _____

QUIZ

Standard 7.RP.1

1. Alexis washes $10\frac{1}{2}$ windows in $\frac{3}{4}$ hours. At this rate, how many windows can she wash in one hour? (1 Point)
 - a) $6\frac{1}{8}$
 - b) $21\frac{1}{2}$
 - c) $84\frac{1}{6}$
 - d) $25\frac{1}{6}$
2. It takes Zach 15 minutes to walk $7\frac{1}{2}$ blocks to the swimming pool. At this rate, how many blocks can he walk in one hour? (1 Point)
 - a) 15 blocks
 - b) 30 blocks
 - c) 60 blocks
 - d) 45 blocks
3. One of the highest snowfall rates ever recorded was in Silver lake, Colorado, in April 1921, when just over 7 feet of snow fell in $27\frac{1}{2}$ hours. What was that rate in feet per hour? (1 Point)
 - a) $14 / 55$ feet per hour
 - b) $168 / 55$ feet per hour
 - c) $55 / 14$ feet per hour
 - d) $55 / 168$ feet per hour
4. What is the unit rate? Given: 183 miles in 3 hours. (1 Point)
 - a) 66 miles per hour
 - b) 63 miles per hour
 - c) 60 miles per hour
 - d) 61 miles per hour
5. What is the unit rate? Given: $\frac{3}{5}$. (1 Point)
 - a) $9/40$
 - b) $5/8$
 - c) $40/9$
 - d) $8/5$
6. Two friends worked out on treadmills at the gym. Who walked at a faster rate? Explain your reasoning. (3 Points)
 - a) Alden walked 2 miles in $\frac{3}{4}$ hour
 - b) Kira walked $1\frac{3}{4}$ miles in 30 minutes.