

BLIZZARD BAG - GRADE 6 ASSIGNMENTS 1-3







Blizzard Bag Activities: Using the Tic Tac Toe Board below, choose an assignment for each snow day. By the end of the three days, you should create a line that is horizontal, vertical, or diagonal. Each skill is a concept that we have had this year.

| 6.NS.1 | 6.NS.3 | 6.NS.5b |
|--|--|---|
| Fluently divide fractions. Complete worksheet 1 | Fluently add, subtract, multiply and divide decimals. Complete worksheet 2 | Understand signs of numbers in ordered pairs indicating locations in quadrants. Complete worksheet 3 |
| 6.RP.1, 2 and 3 Understand the concept of ratio and use ratio language to describe a ratio relationship. Complete worksheet 4 | 6.RP.2b Understand the concept of unit rate. Solve unit rate problems. Complete Worksheet 5 | 6.RP.3c Find a percent of a quantity as a rate per 100. Complete Worksheet 6 |
| 6.RP.3d Use ratio reasoning to convert measurement units. Complete Worksheet 7 | 6.EE.1 Write and evaluate numerical expressions involving whole number exponents. Complete Worksheet 8 | 6.EE.2 Write, read and evaluate expressions in which letters stand for numbers. |

WORKSHEET 1 6.NS.1

| Name | 9 | Date | eClass | | | | |
|--|-------------|------|----------------|--|--|--|--|
| Show all work and express answer in simplest form. | | | | | | | |
| 1. | 9/10 ÷ 2/5 | 6. | 1 1/2 ÷ 1/8 | | | | |
| 2. | 12/15 ÷ 5/6 | 7. | 2 1/3 ÷ 1 3/4 | | | | |
| 3. | 7/8 ÷ 1/2 | 8. | 9 1/8 ÷ 3/5 | | | | |
| 4. | 4/9 ÷ 10/12 | 9. | 12 1/7 ÷ 6 5/7 | | | | |
| 5. | 4/8 ÷ 2/3 | 10. | 6 1/2 ÷ 5/8 | | | | |

Read carefully and solve. Show all work.

- 11. Jeffrey orders an 8-foot sub for a birthday party and cuts it into 1/4 foot sandwiches. How many sandwiches will he have?
- 12. A runner sets a goal to run 100 miles. How many days will it take to reach the goal if she runs 4/5 of a mile each day?
- 13. How many 1/15-meter lengths of rope can be cut from a rope that is 9/10 meter I long?
- 14. Charlie wants to divide 9/10 cup of leftover rice into 1/5 cup containers. How many containers will he need?
- 15. Samantha purchased a bag of dog food that contained 25.5 pounds of food. She feeds her dog 1/2 cup of dog food each day. How many servings are in the bag she purchased?

WORKSHEET 2 6.NS.3

| Name | 9 | _Date | Class |
|-------|-----------------|-------|-----------------|
| Solve | e each problem. | | |
| 1. | 4.95 + 3.98 | 5. | 4.986 + 2.9 + 7 |
| 2. | 6.78 - 4.9 | 6. | 15 - 4.943 |
| 3. | 6.7 x 9.5 | 7. | 8.764 x .004 |
| 4. | 7.718 ÷ 2 | 8. | 952 ÷ 0.34 |
| | | | |

Read each question/statement carefully.

- 9. Which expressions have a value of 12.4? Circle all that apply.
- A. 104.16 ÷ 8.4
- B. 82.96 ÷ 6.8
- C. 59.22 ÷ 4.7
- D. 39.68 ÷ 3.2
- E. 65.19 ÷ 5.3
- 10. Which expressions have a value of 0.064. Circle all that apply.
- A. 0.2 x 0.32
- B. 4 x 0.16
- C. 3.2 x 0.2
- D. 1.6 x 0.04
- E. 0.8 x 0.08
- 11. Nick bought a sweater for \$16.75 and a pair of pants for \$28.92. He paid with a \$50 bill, how much change should he receive?
- 12. Maya mailed three packages. Their weights in pounds were 4.5 pounds, 2.75 pounds, and 3.4 pounds. What was the total weight of the packages? If it costs \$1.75 for each pound shipped, what is the cost of shipping all three packages?

WORKSHEET 3 6.NS.5b

| è | | | | | | | | | | _Da | ate_ | | | | | | (| Class |
|---|------------------------------|------|-------|-----|-----|-----|-----|--------|------------------------|------|------|----------|-----|----|---|-----|----------------------|-------|
| | Graph | n an | d Ial | bel | the | giv | ven | со | ordir | nate | poi | nts | | | | | | |
| | (7, 5) (-2, 8) (3, -7) |) | | | | F | | (4 | 2, -1 , 0) , -9) | | | | | Η. | | (| 0, · 1, ! 0, (| 5) |
| | | | | | | | | | y | | | | | | | 1 | | |
| | | | T | | | | 1 | Ŧ | 4 | T | | | | | 4 | | | |
| | H | + | + | + | - | + | + | + | - | + | + | - | + | - | + | - | - | 5 |
| | H | H | + | Н | | H | + | $^{+}$ | | + | + | | Н | | + | + | - | 2 |
| | | | | | | | | T | 6 | | | | | | | | | |
| | | | | | | | | T | 5 | | | | | | | | | 3 |
| | | 4 | + | H | | - | + | + | - | + | + | - | | | + | - | _ | į. |
| | H | H | + | Н | - | + | + | + | 2 | + | + | \vdash | + | - | + | + | - | ŝ |
| | | | | | | | | t | 1 | | 1 | | | | 1 | | | x |
| | | -8 | | - | -6 | 2 | 4 | - | 1 | 1 | 1 | 1 | - 6 | 7 | 1 | . 8 | 1 | |
| | - | - | + | - | | - | + | + | | + | + | | 4 | - | + | - | - | |
| | H | H | + | H | | + | + | ÷ | 3 | + | + | \vdash | H | - | + | - | - | ŝ |
| | | H | + | | | | + | t | 1 | + | + | | | | 1 | | | j. |
| | | | | | | | | 1 | 6 | | | | | | | | | |
| | _ | | - | | | - | - | - | * | - | - | | | | - | _ | | § |
| | | + | + | + | - | + | + | + | | + | + | | - | - | + | - | - | |
| | H | + | + | H | | - | + | ÷ | 4 | + | + | | | | + | 1 | | 6 |

2. Write the ordered pair in the correct column.

(-2, 3) (1, 4) (2, -1) (-3, -5) (3, 5) (-4, 1) (-2, -2) (3, -4)

Quadrant 1

Quadrant 2

Quadrant 3

Quadrant 4

- 3. Use the grid on the coordinate grid, to help you answer the questions.
- a. If point P (1, 2) is reflected over the y-axis, what will be the coordinates of its new location?
- b. If point Q (3, -4) is reflected over the x-axis, what would be the coordinates of its new location?
- c. If point R (0, 2) is reflected over the x-axis and then reflected over the y-axis, what would be the coordinates of its new location?
- d. Marie's house is located at point (4, 5). She walks 3 blocks north and then two blocks west. What are Marie's new coordinates?
- e. The park is located at (9, -3). Write a description Marie's path to the park.

WORKSHEET 4 6.RP.1, 2, and 3

| Name | Date | Class |
|------|------|-------|
| | | |

| Chantal's Flower Bed | | | | | | |
|-----------------------|-----------------|--|--|--|--|--|
| <u>Type of Flower</u> | Number of Bulbs | | | | | |
| Daffodils | 8 | | | | | |
| Hyacinths | 10 | | | | | |
| Tulips | 12 | | | | | |
| | | | | | | |

- 1. Use the table above to answer.
 - a. What is the ratio of daffodil bulbs to the hyacinth bulbs?
 - b. For every 3 bulbs that were planted, how many were hyacinth bulbs?
 - c. If Chantal planted 20 hyacinth bulbs, how many tulip bulbs did she plant?
 - d. The cost of one daffodil bulb is \$1.75. How much for 8 bulbs?
 - e. The cost of 12 tulip bulbs is \$12.96. How much is one tulip bulb?
- 2. A snack packaging company puts 3 cups of raisins, 2 cups of blueberries, and 5 cups of oats in every batch of granola mix. Determine if each ratio is true or false.

| a. | raisins to oats = $3:5$ | true | or | false |
|----|------------------------------|------|----|-------|
| b. | raisins to blueberries = 2:3 | true | or | false |
| C. | blueberries to oats = 2:5 | true | or | false |
| d. | oats to total fruit = 1:1 | true | or | false |

3. A successful pitcher in baseball should have at least a 3 to 1 ratio of strikes to walks. Decide whether each strikeout to walk ratio is equivalent to 3:1. Circle yes to no.

| a. | 6 strikeouts, 2 walks | yes or no |
|----|------------------------|-----------|
| b. | 10 strikeouts, 5 walks | yes or no |
| C. | 18 strikeouts, 6 walks | yes or no |
| d. | 9 strikeouts, 3 walks | yes or no |

4. Complete the table.

a. Fruit Punch

| Cups of Fruit Juice | 2 | 4 | 6 | ? |
|---------------------|---|---|---|----|
| Cups of Ginger Ale | 3 | 6 | ? | 12 |

b. Cookie Ingredients

| Cups of Flour | 6 | 9 | 12 | ? |
|---------------|---|---|----|---|
| Cups of Sugar | ? | 3 | 4 | 5 |

5. Katie read 3 biographies and 5 novels last summer. Draw a line from each ratio to what it represents.

| a. biographies to novels | 5/8 |
|-------------------------------|-----|
| b. novels to biographies | 8/3 |
| c. novels to total books | 3/5 |
| d. total books to biographies | 5/3 |

6. The Bobcats won 12 games and lost 5 games. Circle every ratio of the Bobcat's wins to losses.

| a. | 12:5 | e. 12/ | ′5 |
|----|-------|---------|----|
| b. | 5:12 | f. 5 to | 12 |
| C. | 12/17 | g. 12: | 17 |

d. 12 to 5

WORKSHEET 5 6.RP.2b

| Name | Date | Class |
|------|------|-------|
| | D | 01400 |

- 1. Ling is driving at a constant speed of 55 miles per hour. At that rate, how long will it take him to drive 275 miles?
- 2. Callie's family spends an average of \$70 per month on electricity. At that rate, what can Callie's family expect to pay for electricity over a year?
- 3. Which of the following does NOT have a unit price of \$24 for one sweater?

| a. | \$38 for 2 sweaters | C. | \$96 for 4 sweaters |
|----|---------------------|----|----------------------|
| b. | \$72 for 3 sweaters | d. | \$120 for 5 sweaters |

- 4. A city charges \$4.80 per 1,000 gallons of water used each month. Circle every water bill usage summary that could belong to a resident of that city.
 - a. \$2.20 for 500 gallons
 b. \$12.60 for 2,500 gallons
 c. \$14.40 for 3,000 gallons
 d. \$16.00 for 4,000 gallons
 e. \$19.20 for 4,500 gallons
 f. \$26.40 for 5,500 gallons
 - g. \$28.80 for 6,000 gallons
- 5. The table shows the amounts that Renee earned babysitting for different numbers of hours. Select true or false for each statement.

true or false

| Hours | 1 | 2 | ? | 6 | 7 | 10 |
|-----------------------|---|-------|-------|---|-------|----|
| Amount Earned (\$) | ? | 13.00 | 32.50 | ? | 45.50 | ? |

- a. Renee earned \$5.50 in 1 hour true or false
- b. Renee earned \$32.50 in 5hours true or false
- c. Renee earned \$39.00 in 6 hours
- d. Renee earned \$55.00 in 10 hours true or false

6. Draw a line from each total price to the corresponding unit price.

| a. | \$20.00 for 5 books | \$1.25 |
|----|----------------------------|--------|
| b. | \$1.00 for 10 pens | \$0.10 |
| C. | \$3.00 for 12 ears of corn | \$0.25 |
| d. | \$10.00 for 8 songs | \$4.00 |

7. Raghav traveled at a rate of 50 miles per hour. At that rate, decided whether Raqhav can travel each given distance in the given amount of time. Select yes or no.

| a. | 700 miles in 10 hours | yes or no |
|----|------------------------|-----------|
| b. | 350 miles in 7 hours | yes or no |
| C. | 200 miles in 2 hours | yes or no |
| d. | 125 miles in 2.5 hours | yes or no |

8. Circle the better unit rate.

a.

b.

C.

d.

| 500 miles in 6 hours | 300 miles in 4 hours |
|------------------------------|------------------------------|
| \$3.79 for 3 dozen eggs | \$2.15 for 2 dozen eggs |
| 600 calories for 8 ounces | 1000 calories for 10 ounces |
| typing 80 words in 4 minutes | typing 60 words in 2 minutes |

WORKSHEET 6 6.RP.3c

| Name | Date | _Grade |
|------|------|--------|
| | | |

1. Circle every statement that is true.

| a. 14% = 0.14 | e. 0.99 = 99% |
|------------------|------------------|
| b. 80% = 8/100 | f. 76% = 76/100 |
| c. 65 = 65% | g. 40/100 = 0.04 |
| d. 21/100 = 0.21 | |

2. Draw a line from each percent to its equivalent fraction.

| a. | 90% | 1/2 |
|----|-----|------|
| b. | 12% | 9/10 |
| C. | 50% | 3/25 |
| d. | 75% | 3/4 |

3. The table shows the scores that several students received on a quiz. Select true or false for each statement. Hint - complete the table first

| Student | Score (Fraction) | Score (Percent) |
|---------|------------------|-----------------|
| Venell | 16/20 | ? |
| Kari | 13/20 | ? |
| Fia | ? | 75% |
| Jeremy | ? | 95% |

4. 435 is 15% of what number?

5. What is 38% of 560?

6. There are 25 students performing int he holiday concert. Of the students, 11 are boys. What percent of the students are boys?

7. As a class project, Messa collected \$126 in donations for local hospice. That amount was 7% of the total amount collected by the class. How much money did the class collect in all?

8. A television is on sale for 30%, if the TV costs \$350, what will be the sale price?

9. 80% of the high school students passed the OGT. If there are 120 high school students, how many didn't pass the test?

10. Seventy -five students took part in the annual blood drive. This is 15% of the school's population. How many total students attend the high school?

WORKSHEET 7 6.RP.3d

| Name | Date | Class | |
|------|------|-------|--|
|------|------|-------|--|

- A. Fill in the missing measurement.
 - 1. 6 cups = _____ounces
 - 2. 12 yards = _____feet
 - 3. _____pounds = 3 Tons
 - 4. _____minutes = 5 hours
- B. A shuffleboard table is 22 feet long. Circle every measure that is equivalent to the table'e length.
 - 1. 7 1/3 yd5. 220 mm2. 2.2 cm6. 66 yd3. 1 ft 10 in7. 264 in4. 7 yd 1 ft
- C. The table shows the weights of four foods in pounds or ounces. Select true or false for each statement.

| Food | Pounds | Ounces |
|------------|--------|--------|
| Pineapple | 2 | ? |
| Watermelon | ? | 256 |
| Steak | ? | 8 |
| Carrot | 0.1 | ? |

| 1. | The pineapple weighs 32 ounces | true or false |
|----|---------------------------------|---------------|
| 2. | The watermelon weighs 16 pounds | true or false |
| 3. | The steak weighs 1 pound | true or false |
| 4. | The carrot weighs 1.6 ounces | true or false |

D. The heights of several flowers and trees in Tina's yard are given below. Compare each height to 1 meter and write it under the correct heading.

| 25 cm | 9,000 mm | 40,000 cm |
|-----------------|----------|----------------------|
| 0.02 km | 790 mm | 0.0008 km |
| | | |
| Less Than 1 Met | ter | Greater than 1 Meter |

E. Draw a line grin each capacity to its equivalent capacity.

| 8 qt |
|-----------|
| 16 c |
| 3 1/2 gal |
| 2 1/2 pt |
| |

- F. Melissa made 164 fluid ounces of lemonade for a party. How many cups of lemonade did Melissa make?
- G. Brendan's dog has a mass of 25,700 grams.
 - 1. What is the dog's mass in milligrams?
 - 2. What is the dog's mass in kilograms?

WORKSHEET 8 6.EE.1

| Nam | е | _Date | _Class | |
|-----------|--|---|-----------------------|--|
| Evaluate. | | | | |
| 1. | 20 + 8 - 4 ² | | | |
| 2. | 6 ÷ 2 -1 | | | |
| 3. | What is the value of the express <i>3a + b</i> | sion when a = 2 and | d b = 4? | |
| 4. | What is the value of the expression below when $k = 4$? 18 - k^2 | | | |
| 5. | Circle every expression that is equal to 6. | | | |
| | a. $6 \times 3 - 12$ b. $2 \times 2 \times 2 + 2$ c. $18 - 4 + 7 - 10$ d. $3^3 - 3$ e. $12 \div 6 + 2^2$ | | | |
| 6. | Select true or false for each statement. | | | |
| | a. $4 \times 4 + 3 = 19$ b. $15/5 - 1 + 8 = 10$ c. $3(2 + 4) = 10$ d. $4 \times 5 + 2 = 28$ e. $3 + 7 \times 2 = 17$ | true or false true or false true or false true or false true or false | | |
| 7. | If $a = 2$ and $b = 4$, is the value of each expression 10? Select yes or no. | | 10? Select yes or no. | |
| | a. $a + 2b$ b. $3b - a/2$ c. $a^3 + b/2$ d. $b^a - 6$ e. $4b - 3a + 1$ | yes or no yes or no yes or no yes or no yes or no | | |
| 8. | Solve. | | | |
| | a. 7+(3+(5+2)2)-4 | | | |

b. (52 + (15 ÷ 3 + 22)) + 32

WORKSHEET 9 6.EE.2

| Name | Date | Grade |
|------|------|-------|
|------|------|-------|

- 1. Circle every statement that is true.
 - a. $(xy)^3$ represents "the cube of the product of a number x and a number y".
 - b. $(n+4)^2$ represents "the sum of the square of a number and 4".
 - c. 2² x (5+n) represents "add 5 and a number n; then multiply by 2 squared".
 - d. n³ 3² represents "subtract the cube of a number from 3 squared".
 - e. (n-2)³ represents "the cube of the difference of n and 2".
- 2. Select true or false for each statement about the representation of the expression "the sum of 6 and 5 times a number n."

| a. 6 is a fac | ctor | true or false |
|----------------|-----------|---------------|
| b. 5 is a fac | ctor | true or false |
| c. 5 is a coe | efficient | true or false |
| d. 6 is an a | ddend | true or false |
| e. 5n is a te | erm | true or false |
| f. 6 is a terr | n | true or false |

- 3. Write an expression for each written statement.
 - a. the product of a and a number 8
 - b. six times the sum of 4 and p
 - c. nine increased by a number k
 - d. seven less than number q
 - e. the sum of 16 squared and the quotient of 8 and a number b
- 4. Which expression is NOT equivalent to 5x + 6?
 - a. 4x + 7 + x 1b. 3x + 3 + 2x + 3c. 5(x + 1) + 1d. x(5 + 6)
- 5. Circle every expression that is equivalent to 4c + 20.
 - a. 2c + 2c + 12 + 8
 - b. 4 (c+5)
 - c. 3c + 20 + 2c
 - d. 4(c+20)

- 6. Solve for the variable.
 - a. 2f = 32
 - b. 29 + c = 62
 - c. j 87 = 165
 - d. 1/5 k = 5
 - e. 36 + x = 54
- 7. Circle every equation that has a solution of 12.
 - a. 9x = 108
 b. x/3 = 4
 c. x + 3 = 9
 d. x-4 = 16
- 8. Patel had 5 less than 4 times as many trophies as Horatio. He has 19 trophies in all. How many trophies does Horatio have?
- 9. The Downtown Theater has 413 seats, which is 8 more than 3 times as many seats as Uptown Theater has. How many seats are there in the Uptown Theater?
- 10. Tristan has 20 less than 3 times as many DVD's as Anna. If Tristan has 55 DVD's, how many DVD's does Anna have?