

Name _____

Homeroom _____

7th Grade Vocabulary You Should Know For the 8th Grade

On a separate paper define the following terms.

- A full Heading with the title “7th Grade Vocabulary,” should be used.**
- Provide a clear definition along with an example if necessary.**

operations
common denominator

equivalent expression
opposite

equation
equivalent

positive
negative

equivalent ratios
proportion

additive inverse
absolute value

ratio
unit rate

rational number
Properties of Operations

proportion
ratio

rational numbers equation
inequality

scale
scale drawing

variable(s)
prism

scale factor
scale model

pyramid
rectangular prism

similar figures

rectangular pyramid

properties of operations

cylinder

coefficient

properties

factor

expand

Directions: Complete the following questions in the space provided. Show all work as needed and follow all directions.

Number System Review-DO NOT USE A CALCULATOR FOR THIS PART.

Multiple Choice— Choose the correct answer for each question. No partial credit will be given.

1. What is the opposite of -3?

- a) 3
- b) -3
- c) 0

2. What is $|-22\frac{5}{8}|$?

- a) $22\frac{5}{8}$
- b) $-22\frac{5}{8}$
- c) 0

3. What is $|8|$?

- a) 8
- b) -8
- c) 0

4. -10 8

- a) >
- b) =
- c) <

5. -20.4 -20.3

- a) >
- b) =

c) $<$

6. 0 $-9\frac{1}{4}$
a) $>$

b) $=$

c) $<$

7. If the temperature reading on a thermometer is 5°C , what will the new reading be if the temperature falls 8.4°C ?

a) -13.4°C

b) -3.4°C

c) 3.4°C

d) 13.4°C

8. A submarine is cruising at -40 meters (40 meters below the surface). It descends 20 meters; then it rises $35\frac{5}{6}$ meters. What is the submarine's new depth?

a) $15\frac{5}{6}$ m

b) $24\frac{1}{6}$ m

c) $35\frac{1}{6}$ m

d) $-5\frac{5}{6}$ m

9. The temperature in North Dakota was -5°C at 4 A.M. It had fallen 3°C since 3 A.M. What was the temperature at 3 A.M.?

a) -8°C

b) -2°C

c) 2°C

d) 8°C

10. Convert the subtraction problem into an addition problem. $-10 - 5$

a) $-10 + 5$

b) $-10 + (-5)$

c) $10 + 5$

d) $10 + (-5)$

11. Convert the subtraction problem into an addition problem. $8.75 - (-4.3)$

a) $-8.75 + 4.3$

b) $-8.75 + (-4.3)$

c) $8.75 + 4.3$

d) $8.75 + (-4.3)$

12. Simplify: $-5 + 3.8[4.1 - (-6.2)]$

a) 2.98

b) 34.14

c) 12.98

d) -90.64

13. Simplify: $8 - 5[(3\frac{1}{2})(-2) + (-13\frac{1}{4})]$

a) -93.25

b) -21.75

c) -60.75

d) 109.25

Simplify:

14. $(-5.2)(-6.1) = \underline{\hspace{2cm}}$

15. $(0)(-13) = \underline{\hspace{2cm}}$

16. $(-7\frac{2}{3})(-4\frac{1}{2}) = \underline{\hspace{2cm}}$

17. $(-14) \div (2) = \underline{\hspace{2cm}}$

18. $(-5.6) \div (-5.6) = \underline{\hspace{2cm}}$

19. $45.5 = \underline{\hspace{2cm}}$

20. $\begin{array}{r} -5 \\ -12 \\ \hline -6 \end{array} = \underline{\hspace{2cm}}$

Extended Constructed Response - Solve the problem, showing all work. Partial credit may be given.

21. Sarah had a balance of \$155 in her bank account at the start of the week. She withdrew \$65.50 on Monday, \$23.25 on Wednesday, and \$26.45 on Thursday. On Friday she deposited \$165.30.

- At the end of the week, does Sarah have more or less money in her savings account than she had at the beginning of the week?
- How much more or less?
- Show all of your work to support your answers.

Equations and Expressions- CALCULATOR ACTIVE

22. Solve the equation: $-52 - 3u = 8$

- a. $u = 14$
- b. $u = 20$
- c. $u = -20$
- d. $u = -30$

23. Solve the equation: $3^x = -\frac{5}{3}(x + 5)$

- a. $x = -7$
- b. $x = 30$
- c. $x = 33$
- d. $x = -30$

24. Solve the equation: $5(r + 4) - 7r = -16$

- a. $r = 18$
- b. $r = -4$
- c. $r = -8$
- d. $r = 16$

25. Solve the equation: $-7(-m - 3) = 45 - m$

- a. $m = -11$
- b. $m = 8$
- c. $m = 3$

26 $-7 = -3 + 2h$ $h =$

27 $-2(2 - r) = 4(5 - r)$ $r =$

28	$2.8(2 + 3w) = -3w + 5.6$	w
.		$=$
29	$-5(s + 12) - 3s = -4(15 + s)$	$s =$
.		

Ratios, Rates & Proportions- CALCULATOR ACTIVE

Multiple Choice— Choose the correct answer for each question. No partial credit will be given.

30. It costs \$47.70 for 6 pizzas. What is the cost per pizza?

- a. \$4.77
- b. \$7.95
- c. \$23.85
- d. \$41.70

31. Cantaloupes are four for \$9, how many can you buy for \$25? Which proportion is properly set up?

- a. $\frac{4}{9} = \frac{25}{x}$
- b. $\frac{9}{25} = \frac{x}{4}$
- c. $\frac{9}{4} = \frac{25}{x}$
- d. $\frac{x}{9} = \frac{25}{4}$

32. What is the correct answer for #2?

- a. 56 cantaloupes
- b. 36 cantaloupes
- c. 11 cantaloupes
- d. 1 cantaloupe

33. Two cases of cans weigh 32 lb. How much do 7 cases weigh?

- e. 23 lb.
- f. 112 lb.
- g. 102 lb.
- h. 224 lb.

34. Which has the lowest unit price?

- a. 11 oz. for \$.33
- b. \$.56 for 20 oz.
- c. 30 oz for \$.87

d. \$1.15 for 40 oz.

35. A machine takes 3.4 hours to make 8 parts. At that rate, how many parts can the machine make in 34 hours?

a. 272

b. 80

c. 14

d. 8

36. There are two sizes of tables at a party. Large tables have 12 seats and small tables have 8 seats. If 3 pizzas are on each large table and 2 pizzas are on each small table. Would you:
- a. Sit at a large table to get the most pizza.
 - b. Sit at a small table to get the most pizza.
 - c. It doesn't matter at which table you sit.
37. A car traveling 118 miles uses 4 gallons of gas. At this rate, how many miles can it travel using 13 gallons of gas?
- a. 9
 - b. 1534
 - c. 1062
 - d. 383.5
38. There are 12 girls and 10 boys in a class. What is the ratio of boys to total students?
- a. 10 to 12
 - b. 10 to 22
 - c. 5 to 6
 - d. 5 to 11
39. In a sample of 40 randomly selected students at a school, 27 students eat breakfast every morning. There are 371 students in the school. Using these results, predict the number of students that eat breakfast.
- a. 68
 - b. 250
 - c. 270
 - d. 358

40. While shopping for bagels, you find several deals. Which is the better buy?

- a. 2 for \$.90
- b. 6 for \$3.00
- c. 10 for \$3.80
- d. 12 for \$4.80

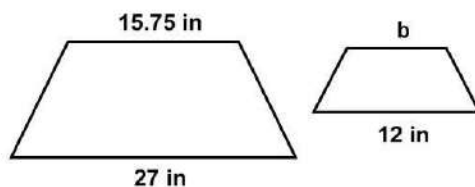
41. Cecelia buys \$32.40 worth of gas. If she buys exactly 13.5 gallons, what is the price per gallon?

- a. \$2.50
- b. \$2.40
- c. \$437.40
- d. \$447.40

Short Constructed Response – Write the correct answer for each question. No partial credit will be given.

42. DVDs are on sale for \$12.50 for a set of two. You have \$35. You can split a set and buy just one disc for the same price per disc as the set. How many discs can you buy? _____

43. Find the area of the larger trapezoid. Round to the nearest tenth if necessary.



Extended Constructed Response - Solve the problem, showing all work. Partial credit may be given.

44. You are testing grape juice recipes. Each recipe calls for grape juice concentrate and water. Mix 1 has 7 cups of concentrate and 13 cups of water, Mix 2 has 2 cups of concentrate and 3 cups of water, and Mix 3 has 1 cup of concentrate and 4 cups of water.

Use ratios to solve:

- a. Which mix will be the most “grapey”?
- b. Which will be the least “grapey”?