

Test 1 Study Guide

092513 Pd:

Name: KEY

1) Simplify. $-|-5| - |10| + 9$

$$\begin{aligned} -5 - 10 + 9 \\ -15 + 9 \\ \hline (-6) \end{aligned}$$

2) Simplify. $|-27| - (-4)(5)$

$$\begin{aligned} 27 - (-20) \\ 27 + 20 \\ \hline (47) \end{aligned}$$

3) A submarine hovers at one hundred twenty feet below sea level. If it ascends thirty feet, what's the new position?

$-120 + 30$

-90 feet

5) Simplify. $[-9 \cdot (-4)] - [7 \cdot (-8)]$

$36 - (-56)$

$36 + 56$

(92)

4) The quotient of negative one hundred and positive ten.

$-100 \div 10$

(-10)

7) Simplify. $[-20 + (-5)] \div 5$

$-25 \div 5$

(-5)

6) Simplify. $\overbrace{8(-2+6)}$

$8 \cdot -2 + 8 \cdot 6$

$-16 + 48$

(32)

8) Simplify. $[(-8 + (-7)) \cdot [-3 - (-5)]]$

$-15 \cdot 2$

(-30)

9) Simplify. $-9 + 3$

-6

10) Simplify. $8 - (-2)$

10

11) Simplify. $-8 \cdot 3$

-24

12) Simplify. $-81 \div 9$

-9

13) Simplify. $-5 + (-17)$

-22

14) Simplify. $4 - 13$

-9

15) Simplify. $-2 \cdot (-11)$

22

16) Simplify. $-121 \div (-11)$

11

17) Simplify. $2(3x - 5)$

$$6x - 10$$

18) Simplify. $-7[3x + (-9)]$

$$-21x + 63$$

19) The product of four and w.

$$4w$$

20) Five more than twice the sum of an unknown number and eleven.

$$2(x + 11) + 5$$

21) Simplify. $2x + 13 + 3x - 8$

$$5x + 5$$

22) Simplify. $2xy + 5wy - 9x - x + 4xy + 6y$

$$6xy + 5wy - 10x + 6y$$

23) Simplify. $-13x + (-14y) - 17x + 14y$

$$-30x$$

24) Simplify. $-9(4a + 8 - 6) + 2a$

$$-34a + (-18)$$

Use the expression $2x + (-7y) + 3w + (-17z) + 12$ to answer the following questions.

25) How many terms are there? 26) List the coefficient(s)

$$\underline{5}$$

$$\underline{2, -7, 3, -17}$$

27) List the constant(s)

$$\underline{12}$$

28) List the variable(s)

$$\underline{x, y, w, z}$$

29) The formula that is used to convert Fahrenheit (F) to Celsius (C) is $5 \cdot (F - 32) + 9$. Convert 86°F to degrees in Celsius.

$$\begin{array}{r} 5 \cdot (86 - 32) \div 9 \\ 5 \cdot (54) \div 9 \end{array} \quad \boxed{30^{\circ}\text{C}}$$

30) Ms. Li wants to make a rectangular garden. The length of the garden is 4ft and width of the garden is 9ft. Use the following formula to find the perimeter of the garden. $P = 2l + 2w$

$$\begin{aligned} &2l + 2w \\ &2(4) + 2(9) \\ &8 + 18 \end{aligned}$$

$$\boxed{26\text{ft}}$$