Name: **Key**

Date: _____

1. Look at the number line.

$$\overleftarrow{\underset{-5}{\underset{\bullet}{P}}\ \underset{}{\underset{\bullet}{Q}}\ \Big|\ \underset{0}{|}\ \ \ \underset{}{\underset{\bullet}{R}}\ \Big|\ \underset{5}{\underset{\bullet}{S}}}\rightarrow$$

   What point shows the location of –6 on the number line?

   A. Point *P*　　　　B. Point *Q*

   C. Point *R*　　　　D. Point *S*

2. The chart below shows the temperature at noon during a week in January.

Day	Temperature
Monday	0°F
Tuesday	6°F
Wednesday	–2°F
Thursday	–8°F
Friday	8°F

   Which day was the coldest?

   A. Monday　　　　B. Tuesday

   C. Wednesday　　**D.** Thursday

3. Students evaluated algebraic expressions that used positive and negative numbers.

   Which phrase will have a negative answer?

   A. The opposite of 72

   B. The opposite of –72

   C. The absolute value of 72

   D. The absolute value of –72

4. Jeff recorded the average temperatures for six months. He will display the temperatures on a number line.

Month	Temperature (°F)
December	–5
January	–16
February	–15
March	20
April	24
May	35

   On the number line, which month's temperature will be between February's and March's temperatures?

   A. December　　　　B. January

   C. April　　　　D. May

5. What is the value of the expression below?

   $$-3(-4)$$

   A. –12　　B. –7　　C. 7　　**D.** 12

6. Which expression has a value of –3?

   A. $-7 + (4) = -11$　　　　B. $-4 + (+7)\ 3$

   C. $-7 + (+4) = -3$　　D. $-4 + (7) -11$

7. $12 \div -3 =$

   A. 9　　B. 4　　C. $-\frac{1}{4}$　　**D.** –4

8. $4 + (-3) =$

   A. -7 B. -1 **C.** 1 D. 7

9. Simplify: $-36 \div (4)$

   A. -9 B. $+9$ C. $\dfrac{-1}{9}$ D. $\dfrac{+1}{9}$

10. What is the value of the expression below?

    $2 + (-5)$

    A. 7 B. 3 **C.** -3 D. -7

11. What is the value of the expression below?

    $-13 + (+9)$

    A. 22 B. 4 **C.** -4 D. -22

12. What is the value of the expression below?

    $-5 + |9 - 11|$

    $1 - 21$

    A. -7 **B.** -3 C. 15 D. 25

    $-5 + 2$

13. What is the value of the expression below?

    $(-4) + 6$

    A. -10 B. -2 **C.** 2 D. 10

14. What is the quotient when 51 is divided by -17?

    $\dfrac{51}{-17} = -3$

    A. 34 B. 3 **C.** -3 D. -34

15. Find the product. $(10)(-5)$

    A. -50 B. -5 C. 5 D. 50

16. Which expression is equivalent to $-8 - 12$?

    A. $-8 + (-12)$ B. $8 - 12$
    C. $-8 - (-12)$ D. $8 + 12$

17. What is the value of the expression shown below?.

    $-6 + (-9)$

    A. -15 B. -3 C. 3 D. 15

18. The temperature in Flagstaff was $-5°$C when Sandy went to bed. The temperature dropped $20°$C during the night. Which integer represents the change in temperature?

    A. $-25°$C   B. $-20°$C
    C. $20°$C   D. $25°$C

19. A dolphin was swimming at 20 feet below sea level. Then it dove to 45 feet below its original position. Which integer represents the depth of the dolphin's dive?

    A. -45 feet   B. -20 feet
    C. 20 feet   D. 45 feet

20. On a winter Monday in Prescott, the temperature at 8 a.m. was −8°F. At 1 p.m. it was 27°F. By how many degrees did the temperature change from morning to afternoon?

   A. −35° B. −19° C. 19° (D.) 35°

   −8° to 27°

   From −8 to 0 = 8
   0 to 27 = 27

21. One morning, the temperature was 5° below zero. By noon, the temperature rose 20° Fahrenheit (F) and then dropped 8°F by evening. What was the evening temperature?

   A. 17° below zero   B. 15° below zero
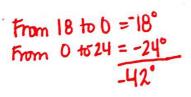
   C. 12° above zero   (D.) 7° above zero

   −5 + 20 = 15 − 8 = 7

22. The low temperatures in January of five Alaskan cities are shown in the table below.

   January Low Temperatures

City	Temperature (°F)
Barrow	−20
Dillingham	9
Galena	−16
Kuparuk	−24
Skagway	18

   What is the difference between the warmest and coldest temperatures?

   A. −6°F   B. 6°F

   C. 15°F   (D.) 42°F

   18° → −24°

   From 18 to 0 = ¯18°
   From 0 to 24 = −24°
   −42°

23. An example of an irrational number is

   A. 5.$\overline{3}$ (B.) $\sqrt{5}$ C. 0   D. $-\frac{11}{6}$

24. The set of real numbers shown below is a subset of which of the following?

   $$\left\{ \frac{2}{3},\ 3,\ -\frac{2}{5},\ 0.57 \right\}$$

   (A.) rational   B. irrationals

   C. integers   D. whole numbers

25. Which number line shows Point P located closest to −15?

   A.
   B.
   C.
   (D.)