

KEY

REMEMBER: Partial credit is granted only when work is shown and comprehensible!

Write an integer to describe each expression below.

1.) Withdraw \$673 from your checking account

-673

2.) A loss of 7 yards

-7

3.) Gain 12 pounds over the holidays

+12

Write a situation that each integer could represent.

4.) -63: Answers may vary (EX: A TEMPERATURE DROP OF 63°)

5.) +85: Answers may vary (EX: I HIKE 85 FEET UPHILL)

Find the absolute value.

6.) $-|-116| = \underline{-116}$

7.) $|-19| = \underline{19}$

8.) $|56| = \underline{56}$

$$\begin{array}{r} -|-116| \\ -116 \end{array}$$

Order from least to greatest. You can use decimals or common denominators.

9.) $-\frac{1}{4}, -\frac{2}{5}, 0.48, \frac{1}{3}, -0.47, -2$

-0.25	-0.4	0.48	0.33	-0.47	-2
④	③	⑥	⑤	②	①

$$\begin{array}{r} 0.25 \\ 4 \overline{) 1.00} \\ \underline{-1.00} \\ 0 \end{array}$$

$$\begin{array}{r} 0.4 \\ 5 \overline{) 2.0} \\ \underline{-2.0} \\ 0 \end{array}$$

$$\begin{array}{r} 0.333 \\ 3 \overline{) 1.000} \\ \underline{-1.000} \\ 0 \end{array}$$

10.) $-1\frac{1}{6}, -0.255, -\frac{2}{3}, -1\frac{3}{10}, -1.765, -0.5$

-1.166	-0.255	-0.66	-1.3	-1.765	-0.5
③	⑥	④	②	①	⑤

$$\begin{array}{r} 0.166 \\ 6 \overline{) 1.000} \\ \underline{-0.600} \\ 400 \\ \underline{-360} \\ 40 \end{array}$$

$$\begin{array}{r} 0.66 \\ 3 \overline{) 2.00} \\ \underline{-1.80} \\ 20 \end{array}$$

$$\begin{array}{r} 0.3 \\ 10 \overline{) 3.0} \\ \underline{-3.0} \\ 0 \end{array}$$

Define and give an example of each

$$\boxed{-1.765, -1\frac{3}{10}, -1\frac{1}{6}, -\frac{2}{3}, -0.5, -0.255}$$

Integers: A SET OF WHOLE NUMBERS & THEIR OPPOSITES

EX: -3, 3, 1, -1

Rational Numbers: A REAL NUMBER THAT CAN BE WRITTEN AS A FRACTION.

$\frac{2}{3}, -0.1, 4$

Absolute Value: THE DISTANCE OF A NUMBER FROM ZERO ON A NUMBER LINE.

$| -5 | = 5$

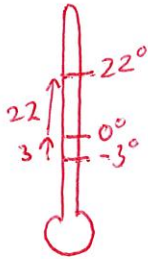
Opposites: TWO NUMBERS THAT ARE EQUAL DISTANCE FROM ZERO ON A NUMBER LINE.

-7, 7

14. The temperature in New York city one morning was 22°F . The wind chill temperature that same morning was -3°F .

What was the difference in the actual and wind chill temperature?

- A. 18 degrees
- B. 19 degrees
- C. 25 degrees
- D. 26 degrees



$$22 - (-3)$$

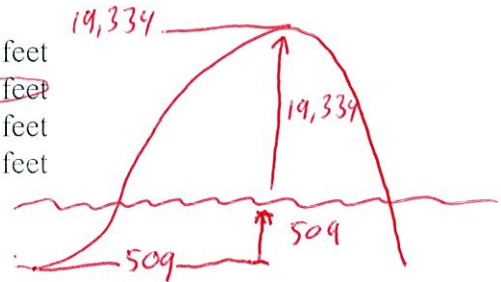
$$22 + 3$$

$$\boxed{25}$$

15. The highest elevation in Africa is in Kilimanjaro which is 19,334 feet above sea level. The lowest elevation in Africa is at Lake Assal which is 509 feet below sea level.

What is the difference in elevation between the 2 locations?

- A. 19,843 feet
- B. 19,833 feet
- C. 19,225 feet
- D. 18,825 feet



$$19\,334 - (-509)$$

$$19\,334 + 509$$

$$\boxed{19\,843}$$

16. Mrs. Fernandez starts out with \$255 in her checking account. She deposits \$35 on Monday. Tuesday afternoon she writes a check for \$75.

Which expression could be used to find her new account balance?

- A. $255 + 35 - 75$
- B. $255 - 35 - 75$
- C. $-255 + 35 - 75$
- D. $255 + 35 + 75$

DEPOSIT: +
WRITECHECK: -
 $255 + 35 - 75$

17. On a number line, what is the distance between -15 and its opposite?

- A. 30 units
- B. -15 units
- C. 15 units
- D. -30 units



$$15$$

$$+ 15$$

$$\hline \boxed{30}$$

18. An ion of phosphate is composed of 15 positively charged protons and 18 negatively charged electrons. Protons have a charge of +1, and electrons have a charge of -1.

What is the overall charge of the ion of phosphate?

- A. +33
- B. -3
- C. -33
- D. +3

$$+15$$

$$-18$$

$$15 - 18 = \boxed{-3}$$

19. Hillary lists the charge of several ions of different elements. A charge of 0 means that the ion has no charge. The farther away the charge is from 0, the more powerful the charge.

Ion	Calcium	Phosphate	Sulfide	Ammonium
Charge	+2	-3	-2	+1

Which ion has the least powerful charge?

- A. Calcium
- B. Phosphate
- C. Sulfide
- D. Ammonium



20. Which expression has the greatest value?

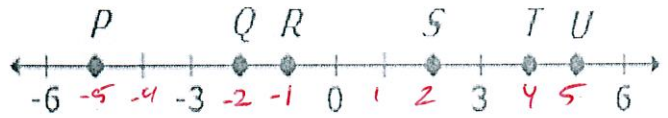
A. $1 \rightarrow 1$

B. $|0| \rightarrow 0$

C. $-1 \rightarrow 1$

D. $|-2| \rightarrow 2$

21. Six points are plotted on the number line.



Which points on the number line are opposites?

A. R and S $-1, 2$

B. P and T $-5, 4$

C. R and U $-1, 5$

D. P and U $-5, 5$

22. The table shows the elevations of 4 locations

Locations	Elevation (meters)
Dead Sea Shore	-424
Death Valley	-86
Fort Worth	601
Catalina Island	49

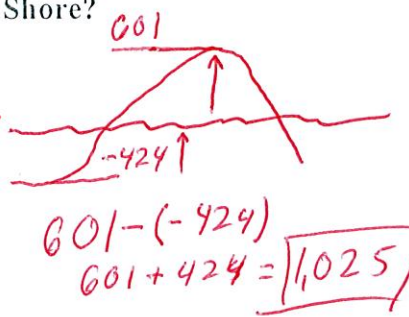
What is the difference in elevation between Fort Worth and Dead Sea Shore?

A. 177 meters

B. 1,025 meters

C. -177 meters

D. -1,025 meters



23. The temperature in Sheboygan, Wisconsin are given in the table.

Day	Temperature (°F)
Monday	5
Tuesday	-5
Wednesday	3
Thursday	-2

Which inequality comparing the temperatures is correct?

A. $-2 < -5 < 3 < 5$

B. $-5 < -2 < 3 < 5$

C. $5 > -2 > -3 > 3$

D. $5 > 3 > -2 > -5$