Standardized Test

Name _ Date .

- 1. Which method can you use to decide which of several integers has the greatest value?
 - **a.** The integer with the greatest value is the one that has the greatest absolute value.
 - **b.** The integer with the greatest value is one that is farthest from zero on the number line.
 - **c.** The integer with the greatest value is the one that is farthest to the right on the number line.
 - **d.** The integer with the greatest value is the one that is farthest to the left on the number line.

2. Which numbers are negative integers? $-\frac{3}{4}$, 13, -19, 6.05, -3.7, 0, -1

a.
$$-\frac{3}{4}$$
, -19, -3.7, -1

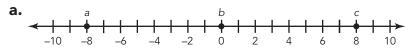
- 3. Which number belongs to the set of rational numbers but does not belong to the set of whole numbers?
 - **a.** −1
 - **b.** 0
 - **c.** 1
 - **d.** 2

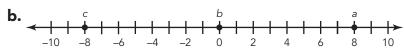
- **4.** A building has 15 floors of offices above ground and 3 floors below ground. Lucy parks on the 3rd floor below ground and has an office on the 10th floor. The ground floor is floor zero. How many floors must she go up from her car to her office?
 - a. 5 floors
 - **b.** 7 floors
 - c. 12 floors
 - d. 13 floors

5. The table gives the highest and lowest recorded temperatures for four cities. Which city recorded the smallest difference between its highest and lowest temperatures?

Extreme Recorded Temperatures						
City	Highest Temperature (°F)	Lowest Temperature (°F)				
Barrow, Alaska	73	-42				
Budapest, Hungary	103	-10				
Prague, Czech Republic	98	-16				
Tehran, Iran	109	-5				

- **a.** Barrow
- **b.** Budapest
- c. Prague
- d. Tehran
- **6.** If a = -8, b = -b, c = -a, which number line shows the correct locations of a, b, and c?







d.-10 -8 -6 -4 -2 0 2 4 6 8 10

7. A company's profit and loss is shown in the table. Losses are represented by amounts within parentheses. Between which two weeks did the company have the largest gain in money?

Week	1	2	3	4	5
Profit or Loss	\$123.87	(\$209.60)	\$317.04	\$165.09	(\$298.46)

- a. Weeks 1 and 2
- **b.** Weeks 2 and 3
- c. Weeks 3 and 4
- d. Weeks 4 and 5
- **8.** Order the rational numbers from least to greatest.

$$-\frac{1}{2}$$
, 0, 1.75, $-7\frac{1}{8}$, -3.62

a. 0,
$$-\frac{1}{2}$$
, 1.75, -3.62 , $-7\frac{1}{8}$

b.
$$-\frac{1}{2}$$
, 0, 1.75, -3.62 , $-7\frac{1}{8}$

c.
$$-7\frac{1}{8}$$
, -3.62 , $-\frac{1}{2}$, 0, 1.75

d.
$$-7\frac{1}{8}$$
, -3.62 , 0 , $-\frac{1}{2}$, 1.75

9. A building has 23 floors of offices above ground and 5 floors below ground. Nathan parks on the 2nd floor below ground and has an office on the 18th floor. The ground floor is floor zero. Which absolute value expression represents how many floors he must go up to get from his car to his office?

10. The average daily temperature in Denton rose from -8°F in January to 43°F in March. What was the rise in average daily temperature from January to March?



- **a.** The average temperature rose 51°F.
- **b.** The average temperature rose 35°F
- **c.** The average temperature rose 43°F.
- d. The average temperature rose 48°F.

- **11.** Which number has the least value?
 - **a.** |-10.869|
 - **b.** $-14\frac{6}{7}$
 - **c.** 9.21
 - **d.** $|-10\frac{1}{4}|$

12. The change in water level of a lake is shown in the table. How much did the water level change between Weeks 2 and 3?

Week	1	2	3	4
Water Level (inches)	1 3 8	$-2\frac{1}{4}$	1 5 8	$-1\frac{1}{2}$

- **a.** $\frac{1}{2}$
- **b.** $\frac{5}{8}$
- **c.** $3\frac{3}{4}$
- **d.** $3\frac{7}{8}$

- **13.** Which rational number represents a decrease in water level from 8 feet to 6 feet?
 - **a.** 6
 - **b.** 2
 - **c.** -2
 - **d.** -6

- **14.** Which number represents the rational number -4.108 in the form $\frac{a}{b}$, where a and b are integers and $b \neq 0$?
 - **a.** $-\frac{4108}{1000}$
 - **b.** $-\frac{4.108}{1}$
 - **c.** $-\frac{4108}{100}$
 - **d.** $\frac{4.108}{100}$

15. A team of scientists are measuring the amount of snow at the top of a mountain. The table shows the changes in snow amounts by year. What does 0 represent in this situation?

Year	1	2	3	4	5
Amount of snow change (inches)	-17	2	5	-3	-1

- a. inches of snow at the top of the mountain
- **b.** year when snow measuring began
- c. final year of measuring snow
- d. original amount of snow before measuring began

- **16.** Which number has an absolute value greater than |-3|? Select all that apply.
 - **a.** |2|
 - **b.** |-5|
 - **c.** |9|
 - **d.** |1|
 - **e.** |7|
 - **f.** |-1|

17. Which absolute value number sentence is true? Select all that apply.

a.
$$|-11| - |11| = 0$$

b.
$$|-3| - |5| = -8$$

c.
$$|7| + |-8| = 1$$

d.
$$|5| + |-5| = 0$$

e.
$$|2| - |-2| = 4$$

f.
$$|-9| + |-11| = 20$$

- **18.** Which statement is false? Select all that apply.
 - **a.** All natural numbers are integers.
 - **b.** All whole numbers are natural numbers.
 - c. All rational numbers are integers.
 - **d.** All whole numbers are integers.
 - e. Zero is not a natural number.
 - **f.** All natural numbers are whole numbers.

19. The table shows the temperature change for each of 5 weeks. Which temperature changes are greater than the change in Week 3? Select all that apply.

Week	1	2	3	4	5
Temperature change (°F)	-8	-2	6	5	-1

- **a.** 3°F
- **b.** 9°F
- **c.** −10°F
- **d.** 0°F
- **e.** −4°F
- **f.** -8.5° F
- 20. Which number is not an integer? Select all that apply.
 - **a.** $3\frac{2}{3}$
 - **b.** -7
 - **c.** $\frac{1}{2}$
 - **d.** 4
 - **e.** 0
 - **f.** -1.63