



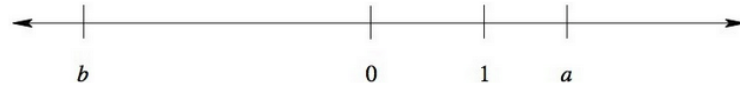
Mrs. Cole
Subject: Mathematics
State: Michigan

Student Name: _____

Teacher Name: _____

School Name: _____

1 A number line is shown below. The numbers 0 and 1 are marked on the line, as are two other numbers a and b .



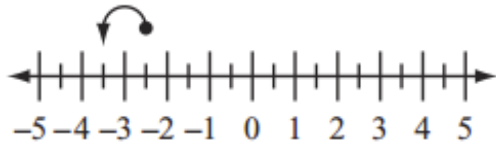
Which of the following numbers is negative? Choose all that apply.

- (A) $a - 1$
- (B) $a - 2$
- (C) $-b$
- (D) $a + b$
- (E) $a - b$
- (F) $ab + 1$

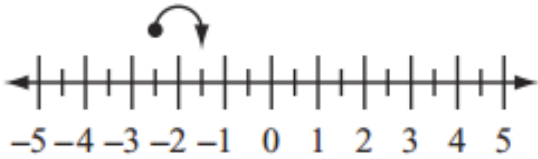
2 Which of the following number lines models the expression below?

$$-2.5 + (-1)$$

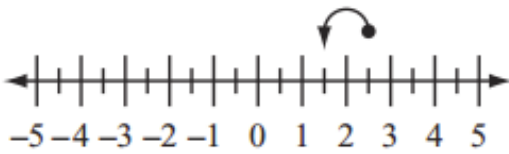
(A)



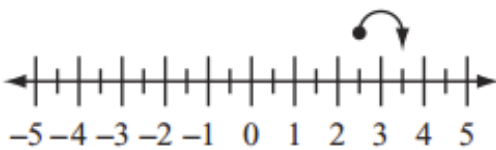
(B)



(C)



(D)



3 The temperature in a city increased from -12°F at dawn to 7°F in the afternoon. What was the change in temperature in degrees Fahrenheit?

4 Altitude above sea level is given in positive values and below sea level is given in negative values. Which situation describes a hiker in Death Valley stopping at an altitude of 0 feet?

- (A) The hiker starts at -10 feet then increases altitude by 10 feet.
- (B) The hiker starts at -10 feet then decreases altitude by 10 feet.
- (C) The hiker starts at 10 feet then increases altitude by 10 feet.
- (D) The hiker starts at 0 feet then decreases altitude by 10 feet.

- 5 Robert recorded the temperature outside his house in the table shown.

Time	Temperature (°F)
4:00 p.m.	15
6:00 a.m.	-7

Robert claims the difference between the temperatures is 8 degrees.

- (a) Explain why Robert's claim is incorrect.
- (b) What is the correct difference in temperatures?

6 The current temperature is -7°C . The high temperature yesterday was as many degrees above 0°C as the current temperature is below 0°C . Which expression could be used to find the number of degrees between the current temperature and yesterday's high temperature?

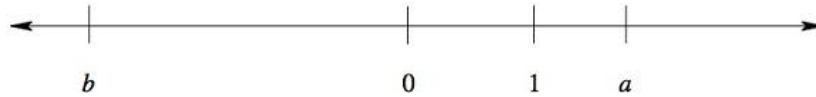
(A) $0-7$

(B) $-7+7$

(C) $7+0$

(D) $7+7$

7 A number line is shown below. The numbers 0 and 1 are marked on the line, as are two other numbers a and b .



Which of the following numbers will be negative? Choose all that apply, and explain why each is negative or is not.

(a) $a - 1$

(b) $a - 2$

(c) $-b$

(d) $a + b$

(e) $a - b$

(f) $ab + 1$

8 Graham's monthly bank statement showed the following deposits and withdrawals:

-\$25.20, \$52.75, -\$22.04, -\$8.50, \$94.11

If Graham's balance in the account was \$47.86 at the beginning of the month, what was the account balance at the end of the month?

Show your work.