2016 Mathematics Standards of Learning Algebra Readiness Formative Assessment

1A.6a

1. Use the numbers below to create two ordered pairs so that the slope passing through these two points is positive.



2. Select two ordered pairs so the slope of the line passing through the two selected points is equal to zero.

(-1, 3) (-2, -4) (0, 1) (-3, 0) (4, 3) (5, -1) (-2, 1) (3, -2)

- 3. What is the slope of the line for the equation 3y + 4x = 8?
 - A. 4 B. 3 C. $-\frac{4}{3}$ D. $-\frac{3}{4}$
- 4. The temperature outside an airplane is recorded as the airplane ascends. A graph of the temperature, d, in degrees Farenheit over time, m, in minutes displays coordinate points that are represented as (m,d) on the graph. The points (2, 40) and (14, -8) are included on the graph. Assuming that the temperature is changing at a constant rate, what is the rate of change in degrees per minute?

A. -4B. $-\frac{8}{3}$ C. $-\frac{3}{8}$ D. $-\frac{1}{4}$



5. What is the slope of the line graphed?

A. 5
B.
$$\frac{1}{5}$$

C. $-\frac{3}{2}$
D. $-\frac{2}{3}$

- 6. For the line x = -6, the slope is—
 - A. positive
 - B. negative
 - C. zero
 - D. undefined