Slopes:
Match each slope with a graph of a line.

____ 1. \( m = \frac{1}{3} \)

____ 2. \( m = -\frac{3}{4} \)

____ 3. \( m = -\frac{1}{4} \)

____ 4. \( m = -2 \)

____ 5. \( m = \frac{3}{2} \)

____ 6. \( m = 3 \)

7. Describe the following slopes.

A.

8. Find the slope of a line that passes through the given points.

A. \((-3, 2)\) and \((-1, -4)\)  
B. the origin and \((-1, 4)\)  
C. \((4, 2)\) and \((-3, 2)\)
9. A directed line segment is a line segment from one point to another point in the coordinate plane. The segment is described by an ordered pair of the directional change of x followed by the directional change of y. Find the components of $\overrightarrow{AB}$ in each problem below.

A. $\overrightarrow{AB}$

B. $\overrightarrow{AB}$

C. $\overrightarrow{AB}$

10. Determine if the given point lies on the given line.

A. Line $m$: $y = \frac{1}{2}x - 2$
   Point A: (6, 1)

B. Line $n$: $3y = -2x + 1$
   Point B: (5, 3)

11. Determine the equation of the graphed lines:

A. Line

B. Line

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12. Determine the **slope** and **y-intercept** of each of the linear equations below.

A. \( y = \frac{2}{5}x - 3 \)  
B. \( 3y - 8 = 2x \)  
C. \( y = 5 \)  
D. \( x = 3 \)

13. Graph the following lines:

A. \( y = -\frac{3}{2}x - 2 \)  
B. \( 2y - 4x = 6 \)  
C. \( y = 5 \) and \( x = -4 \)

14. Given each of the following parameters, determine an equation of each line in slope intercept form.

A. Find the equation of a line with a slope of \( \frac{1}{2} \) and y-intercept of 5  
B. Find the equation of a line with a slope of \( \frac{2}{3} \) and passing through the point \( (6, -4) \)  
C. Find the equation of a line passes through the points \( (4, 2) \) and \( (-8, 5) \)