S.ID.C.7: Slope 2
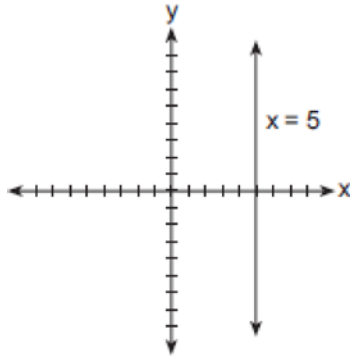
1 The accompanying figure shows the graph of the equation $x = 5$.

What is the slope of the line $x = 5$?
1) 5 2) −5 3) 0 4) undefined

2 What is the slope of a line represented by the equation $2y = x - 4$?

1) 1 2) $\frac{1}{2}$ 3) −1 4) $-\frac{1}{2}$

3 What is the slope of the line whose equation is $2y = 5x + 4$?

1) 5 2) 2 3) $\frac{5}{2}$ 4) $\frac{2}{5}$

4 What is the slope of the line represented by the equation $4x + 3y = 7$?

1) $\frac{7}{4}$ 2) $\frac{7}{3}$ 3) $-\frac{3}{4}$ 4) $-\frac{4}{3}$

5 What is the slope of the line represented by the equation $4x + 3y = 12$?

1) $\frac{4}{3}$ 2) $\frac{3}{4}$ 3) $-\frac{3}{4}$ 4) $-\frac{4}{3}$

6 What is the slope of the line whose equation is $3x - 7y = 9$?

1) $-\frac{3}{7}$ 2) $\frac{3}{7}$ 3) $-\frac{7}{3}$ 4) $\frac{7}{3}$

7 What is the slope of the line whose equation is $3x - 4y - 16 = 0$?

1) $\frac{3}{4}$ 2) $\frac{4}{3}$ 3) 3 4) −4

8 What is the slope of the linear equation $5y - 10x = -15$?
1) 10 2) 2 3) −10 4) −15

9 The line represented by the equation $2y - 3x = 4$ has a slope of

1) $-\frac{3}{2}$ 2) 2 3) 3 4) $\frac{3}{2}$

10 What is the slope of the line whose equation is $4x = 3(y + 8)$?

1) $\frac{4}{3}$ 2) $\frac{3}{4}$ 3) $-\frac{4}{3}$ 4) $-\frac{3}{4}$

11 Which linear equation represents a line that has a slope of $\frac{2}{3}$?
1) $-2y = -3x + 6$ 2) $-3y = 2x + 6$
3) $3y = -2x + 6$ 4) $3y = 2x + 6$

12 The line $3x - 2y = 12$ has
1) a slope of $\frac{3}{2}$ and a y-intercept of −6 2) a slope of $-\frac{3}{2}$ and a y-intercept of 6 3) a slope of 3 and a y-intercept of −2 4) a slope of −3 and a y-intercept of −6

S.ID.C.7: Slope 2
Answer Section

1 ANS: 4   REF: 060012a

2 ANS: 2

$$y = \frac{1}{2}x - 2$$

REF: 011409ia

3 ANS: 3

To solve for *y*, divide the equation by 2.

$$\frac{2y}{2} = \frac{5x}{2} + \frac{4}{2}$$
$$y = \frac{5}{2}x + 2$$

REF: 010203a

4 ANS: 4

$$m = \frac{-A}{B} = \frac{-4}{3}$$

REF: 011516ia

5 ANS: 4

$$m = \frac{-A}{B} = \frac{-4}{3}$$

REF: 061319ia

6 ANS: 2

$$m = \frac{-A}{B} = \frac{-3}{-7} = \frac{3}{7}$$

REF: 011122ia

7 ANS: 1

$$m = -\frac{A}{B} = -\left(\frac{3}{-4}\right) = \frac{3}{4}$$

REF: 089919a

8 ANS: 2

$$m = -\frac{A}{B} = -\left(\frac{-10}{5}\right) = 2$$

REF: 060205a

9 ANS: 4

$$m = \frac{-A}{B} = \frac{-(-3)}{2} = \frac{3}{2}$$

REF: 061212ia

10 ANS: 1

$$4x = 3y + 24$$

$$4x - 24 = 3y$$

$$y = \frac{4}{3}x - 8$$

REF: 061615ia

11 ANS: 4 REF: 061509ia

12 ANS: 1

$$m = -\frac{A}{B} = -\left(\frac{3}{-2}\right) = \frac{3}{2}. \quad y\text{-intercept} = \frac{C}{B} = \frac{12}{-2} = -6.$$

REF: 060428a