S.ID.C.7: Slope 1
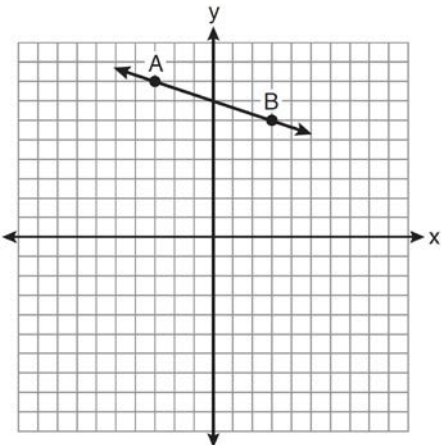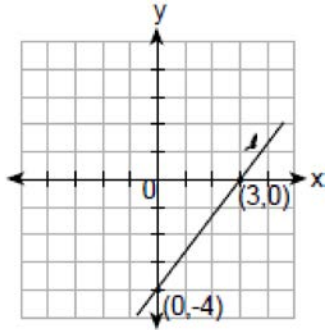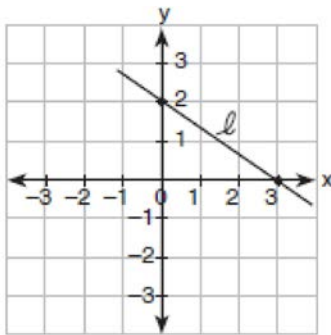
1 If a line is horizontal, its slope is
   1) 1 2) 0 3) undefined 4) negative

2 What is the slope of the line containing the points $(3,4)$ and $(-6,10)$?
   1) $\frac{1}{2}$ 2) 2 3) $-\frac{2}{3}$ 4) $-\frac{3}{2}$

3 What is the slope of the line that passes through the points $(-6,1)$ and $(4,-4)$?
   1) -2 2) 2 3) $-\frac{1}{2}$ 4) $\frac{1}{2}$

4 What is the slope of the line that passes through the points $(2,5)$ and $(7,3)$?
   1) $-\frac{5}{2}$ 2) $-\frac{2}{5}$ 3) $\frac{8}{9}$ 4) $\frac{9}{8}$

5 What is the slope of the line passing through the points $(-2,4)$ and $(3,6)$?
   1) $-\frac{5}{2}$ 2) $-\frac{2}{5}$ 3) $\frac{2}{5}$ 4) $\frac{5}{2}$

6 What is the slope of the line that passes through the points $(3,5)$ and $(-2,2)$?
   1) $\frac{1}{5}$ 2) $\frac{3}{5}$ 3) $\frac{5}{3}$ 4) 5

7 What is the slope of the line that passes through the points $(2,-3)$ and $(5,1)$?
   1) $-\frac{2}{3}$ 2) $\frac{2}{3}$ 3) $-\frac{4}{3}$ 4) $\frac{4}{3}$

8 What is the slope of the line that passes through the points $(-5,4)$ and $(15,-4)$?
   1) $-\frac{2}{5}$ 2) 0 3) $-\frac{5}{2}$ 4) undefined

9 What is the slope of the line that passes through the points $(4,-7)$ and $(9,1)$?
   1) $\frac{5}{8}$ 2) $\frac{8}{5}$ 3) $-\frac{6}{12}$ 4) $-\frac{13}{6}$

10 What is the slope of a line that passes through the points $(-2,-7)$ and $(-6,-2)$?
   1) $-\frac{4}{5}$ 2) $-\frac{5}{4}$ 3) $\frac{8}{9}$ 4) $\frac{9}{8}$

11 What is the slope of a line passing through points $(-7,5)$ and $(5,-3)$?
   1) $-\frac{3}{2}$ 2) $-\frac{2}{3}$ 3) $\frac{2}{3}$ 4) $\frac{3}{2}$

12 A line with a slope of $\frac{1}{3}$ passes through the point $(3,6)$. Which point also lies on this line?
   1) $(6,3)$ 2) $(7,6)$ 3) $(-3,-3)$ 4) $(-6,3)$

13 Line segment AB has a slope of $\frac{3}{4}$. If the coordinates of point A are $(2,5)$, the coordinates of point B could be
   1) $(6,8)$ 2) $(5,9)$ 3) $(-1,1)$ 4) $(6,2)$

14 What is the slope of the line passing through the points A and B, as shown on the graph below?

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

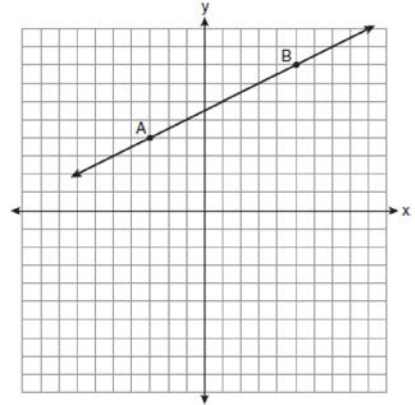15 What is the slope of line ℓ shown in the accompanying diagram?

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

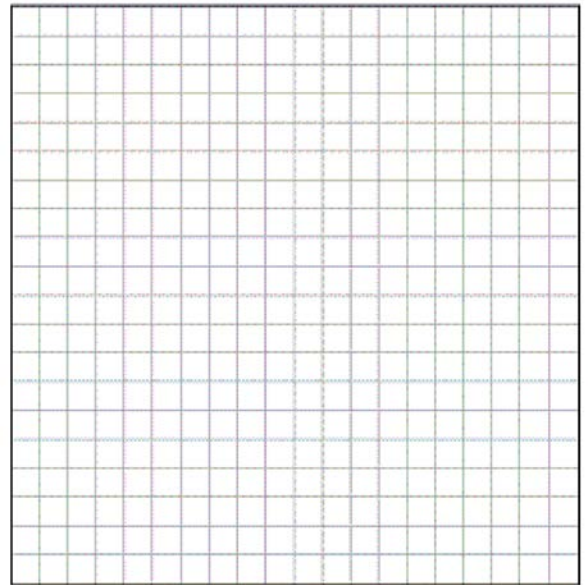16 What is the slope of line ℓ in the accompanying diagram?

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

17 In the diagram below, what is the slope of the line passing through points A and B?

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

18 A straight line with slope 5 contains the points $(1,2)$ and $(3,K)$. Find the value of K. [The use of the accompanying grid is optional.]

S.ID.C.7: Slope 1
Answer Section

1 ANS: 2   REF: 060618a

2 ANS: 3

$$m = \frac{4 - 10}{3 - (-6)} = -\frac{2}{3}$$

   REF: fall0716ia

3 ANS: 3

$$m = \frac{1 - (-4)}{-6 - 4} = -\frac{1}{2}$$

   REF: 060820ia

4 ANS: 2

$$m = \frac{5 - 3}{2 - 7} = -\frac{2}{5}$$

   REF: 010913ia

5 ANS: 3

$$m = \frac{6 - 4}{3 - (-2)} = \frac{2}{5}$$

   REF: 061110ia

6 ANS: 2

$$m = \frac{5 - 2}{3 - (-2)} = \frac{3}{5}$$

   REF: 061004ia

7 ANS: 4

$$m = \frac{-3 - 1}{2 - 5} = \frac{-4}{-3} = \frac{4}{3}$$

   REF: 011215ia

8 ANS: 1

$$m = \frac{4 - (-4)}{-5 - 15} = -\frac{2}{5}$$

   REF: 080915ia

9 ANS: 2

$$m = \frac{-7 - 1}{4 - 9} = \frac{-8}{-5} = \frac{8}{5}$$

   REF: 081310ia

10 ANS: 2

$$m = \frac{-7 - (-2)}{-2 - (-6)} = \frac{-5}{4}$$

REF: 061410ia

11 ANS: 2

$$m = \frac{5 - -3}{-7 - 5} = \frac{8}{-12} = -\frac{2}{3}$$

REF: 081411ia

12 ANS: 4

$$\frac{6 - 3}{3 - (-6)} = \frac{3}{9} = \frac{1}{3}$$

REF: 080828a

13 ANS: 1

$$\frac{8 - 5}{6 - 2} = \frac{3}{4}$$

REF: 080728a

14 ANS: 2

$A(-3,8)$ and $B(3,6)$. $m = \frac{8 - 6}{-3 - 3} = \frac{2}{-6} = -\frac{1}{3}$

REF: 081005ia

15 ANS: 1

$$m = \frac{-4 - 0}{0 - 3} = \frac{4}{3}$$

REF: 069918a

16 ANS: 2

$$m = \frac{2 - 0}{0 - 3} = -\frac{2}{3}$$

REF: 010115a

17 ANS: 4

$A(-3,4)$ and $B(5,8)$. $m = \frac{4 - 8}{-3 - 5} = \frac{-4}{-8} = \frac{1}{2}$
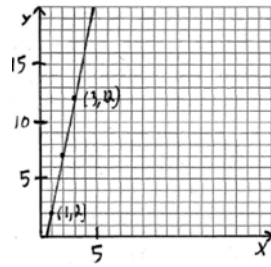
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18 ANS:

$$5 = \frac{2 - K}{1 - 3}$$

12. $-10 = 2 - K$.

$$K = 12$$

REF: 010024a