Name:_____Date:_____Per:_____

Determine the Slope of a Line   Determine the Equation of a Line

QUOTABLE PUZZLES—   Slope and equations of lines

Directions: 1. Find the slope for the following problems. 2. Match that answer to the correct letter of the alphabet. 3. Enter that letter of the alphabet on the blank corresponding to the problem number. 4. Write the equation of the line in point-slope form and then convert to slope intercept form.

___	___	___	___	___	___	___	___	___	___	___	___	___	___	___	___	___	___
3	10	14	12	5	9	3	2	9	3	5	14	4	5	2	2	11	8

A	B	C	D	E	F	G	H	I	J	K	L	M
-2	1	4/7	-1/9	2	-4	6	1/5	undefined	25	-18	-1/3	-5

N	O	P	Q	R	S	T	U	V	W	X	Y	Z
2/7	3	2/5	5/2	7/4	4	¼	0	½	- ½	-1	-3	-7/4

1. Find the slope

1. (-2, 2), (3, -3)

2. (-5, 4), (-1, 11)

3. (-2, -8), (1, 4)

4. (18, -4), (6, -10)

5. (3, 4), (4, 6)

6. (3, 6), (4, 4)

7. (4, -5), (11, -1)

8. (2, 7), (-5, 5)

9. (-4, -6), (-4, -8)

10. (8, 3), (2, 5)

11. (5, -2), (9, -2)

12. (-3, 6), (-8, 4)

13. (4, 2), (-5, 3)

14. (6, 10), (3, 1)

4. Write the equation in point-slope form and convert to slope intercept form

1. (-2, 2),   (3, -3)

4. (18, -4), (6, -10)

2. (-5, 4),   (-1, 11)

5. (3, 4),   (4, 6)

3. (-2, -8), (1, 4)

6. (3, 6),   (4, 4)

7. (4, -5), (11, -1)

10. (8, 3), (2, 5)

8. (2, 7),   (-5, 5)

11. (5, -2), (9, -2)

9. (-4, -6), (-4, -8)

12. (-3, 6), (-8, 4)

13. (4, 2), (-5, 3)

14. (6, 10), (3, 1)

Independent Practice—   **Slope and Equations of lines**

Read and solve.

1. What is the slope of the line represented by $y = \dfrac{2}{3} x + 4$?

    A. $\dfrac{3}{2}$

    B. $\dfrac{2}{3}$

    C. $-\dfrac{2}{3}$

    D. -2

2. Which describes the slope of the line that passes through (-7, 3) and (8, 5)?

    A. Positive
    B. Negative
    C. Zero
    D. Undefined

3. What is the slope of the line that contains (4, -1) and (3, 3)?

    A. -4

    B. $-\dfrac{1}{2}$

    C. $-\dfrac{1}{4}$

    D. 2

5. What is the slope of the line containing (-3, -1) and (1, -2) ?

    A. -4

    B. $-\dfrac{1}{4}$

    C. $\dfrac{1}{4}$

    D. 4

4. What is the slope of the line $3x + y = 5$?

    A. 3

    B. $\dfrac{1}{3}$

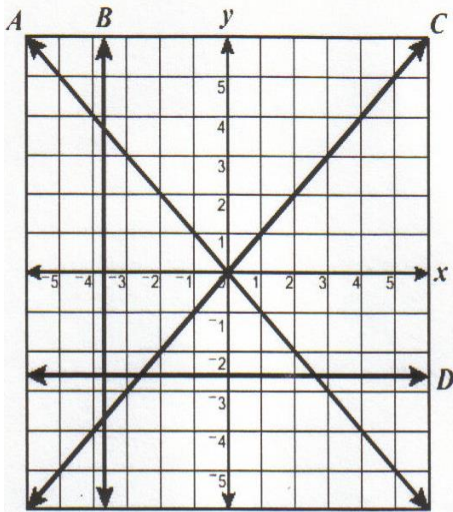   C. $-\dfrac{1}{3}$

    D. -3

6. What is the slope of the line $3x - 6y = 15$?

    A.   -9

    B. $-\dfrac{1}{2}$

    C. $\dfrac{1}{2}$

    D.   2

7. What is the slope of the line $x = -3$?

    A.   -3
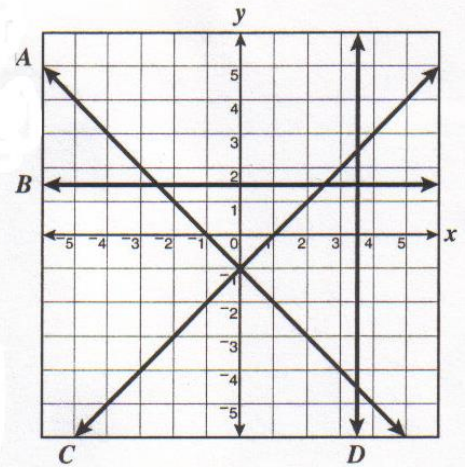   B.   0
    C.   Undefined
    D.   3

8.

Which line on the graph has undefined slope?

    A

    B

    C

    D
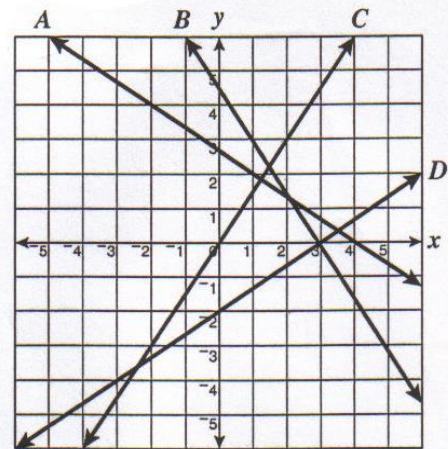
9.

Which line on the graph has an undefined slope?

A A

B B

C C

D D

10.

Which line on the grid appears to have slope $\frac{2}{3}$?

F A

G B

H C

J D

Exercise 2   (answers on page 41)

Find the number that belongs in the space by **building** or **reducing** equivalent fractions.

1) $\dfrac{1}{2} = \dfrac{}{10}$

2) $\dfrac{2}{3} = \dfrac{}{15}$

3) $\dfrac{5}{6} = \dfrac{}{12}$

4) $\dfrac{3}{4} = \dfrac{}{12}$

5) $\dfrac{2}{5} = \dfrac{}{20}$

6) $\dfrac{5}{7} = \dfrac{}{21}$

7) $\dfrac{3}{6} = \dfrac{}{2}$

8) $\dfrac{6}{8} = \dfrac{}{4}$

9) $\dfrac{8}{10} = \dfrac{}{5}$

10) $\dfrac{12}{24} = \dfrac{}{2}$

11) $\dfrac{5}{30} = \dfrac{}{6}$

12) $\dfrac{7}{14} = \dfrac{}{2}$

13) $\dfrac{2}{7} = \dfrac{}{35}$

14) $\dfrac{7}{42} = \dfrac{}{6}$

15) $\dfrac{10}{15} = \dfrac{}{3}$

16) $\dfrac{1}{8} = \dfrac{}{24}$

17) $\dfrac{1}{3} = \dfrac{}{24}$

18) $\dfrac{20}{22} = \dfrac{}{11}$

19) $\dfrac{21}{42} = \dfrac{}{2}$

20) $\dfrac{17}{51} = \dfrac{}{3}$

21) $\dfrac{10}{30} = \dfrac{}{3}$