Name\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_Date\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_Period\_\_\_\_

 Unit 5 Review

Find the slope of each line below.



# 1

# 2

# 3

# 4

1. Line # 1:\_\_\_\_\_\_\_\_\_\_\_\_\_\_

2. Line # 2:\_\_\_\_\_\_\_\_\_\_\_\_\_\_

3. Line # 3:\_\_\_\_\_\_\_\_\_\_\_\_\_\_

4. Line # 4:\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Find the slope of the line through the given points.

5. $P\left(4, 5\right)$ and $Q\left(-4, -2\right)$ 6. $P\left(4, 1\right)$ and $Q\left(-3, 5\right)$

$m=$\_\_\_\_\_\_\_\_\_\_ $m=$\_\_\_\_\_\_\_\_\_\_

1. $P\left(5, -8\right)$ and $Q\left(-2, -6\right)$

$m=$\_\_\_\_\_\_\_\_\_\_

Graph the following lines.

8. Through the point $\left(-4, -2\right)$ with 9. $y=\frac{2}{7}x-4$ $m=$\_\_\_\_\_ $b=$\_\_\_\_\_

 a slope of $-\frac{2}{3}$





10. $y=\frac{1}{2}x+2$ $m=$\_\_\_\_\_ $b=$\_\_\_\_\_ 11. $y=-\frac{2}{5}x-2$ $m=$\_\_\_\_\_ $b=$\_\_\_\_\_





12. Through the point $A\left(-2, -1\right)$ 13. Where $m=-4$ and $b=2$

 and a slope of $\frac{-1}{4}$





**Solve the following using direct variation.**

14. If $y$ varies directly as $x$ and $y=12$ when $x=3$, find $y$ when $x=16$.

 \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

15. The distance, $d$, varies directly with the time, $t$. If you have driven $225 miles$ for$5 hours$, how long would it take you to drive $315 miles$?

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

 **Review**

16. If $f\left(x\right)=2x^{2}+1$, find the **range** if the domain is $D=\left\{-2, 0, 3\right\}$. $R=$\_\_\_\_\_\_\_\_

17. If $f\left(x\right)=\left|3x-1\right|$, find $f\left(2\right)$and $f\left(-2\right)$**.** $f\left(2\right)=$\_\_\_\_\_\_

 $f\left(-2\right)=$\_\_\_\_\_\_

18. Solve: $3\left(2+x\right)-4x=x+16$

19. Solve: $9x-\left(3x-2\right)+10=0$

20. Simplify: $\left|-32+\left|-10\right|\right|$

21. Evaluate: $\frac{6-3^{2}∙ 4}{1-6}$

22. Simplify. THEN evaluate for $x=3$, $y=-4$ and $z=-2$.

 $7\left(x-y\right)-3\left(z+2x\right)$

23. Solve: $P=2L+2W$ for $L$

**ANSWERS**

$$\frac{7}{8}$$





$$0$$

$$\frac{3}{2}$$

$$-\frac{4}{7}$$

$$-\frac{2}{7}$$

$$\left\{9, 1, 19\right\}$$

$$-\frac{1}{3}$$

$$\frac{2}{7}; -4$$

$$\frac{P}{2}-W=L$$

$$64$$

$$37$$

$$22$$

$$-2$$

$$7$$

$$-5$$

$$7$$

$$5$$

$$6$$

$$-\frac{2}{5}; -2$$

$$\frac{1}{2};2$$

Undefined