Name: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Date: \_\_\_\_\_\_\_\_\_\_\_\_\_\_

Unit 3 Quiz Review

1. In the diagram $\overleftrightarrow{FG}⊥\overleftrightarrow{GH}$. Find the value of *x*.





1. What statement must be true if $c⊥d$ ?
	1. $m∠1+m∠2=90°$
	2. $m∠1+m∠2<90°$
	3. $m∠1+m∠2>90$
	4. Cannot be determined

Answer the following questions using the diagram below:

1. Name all sets of complementary angles:

**6**

**7**

1. Name all pairs of vertical angles:
2. Given $m∠6=30° $and $m∠7=40°$ find

all missing angle measures.

1. What information would be enough to prove two lines are perpendicular to each other? (3)
2. What information would be enough to prove two lines are parallel? (4)
3. Nicole is working on the following construction with her compass and straightedge. Which best describes the construction that Nicole is doing?

1. Complete the construction in #7 by drawing in the last step.
2. Milon is working on the following construction with his compass and straightedge. What is he constructing?



1. Complete the construction in #9 by drawing in the last step.
2. Javion is working on the following construction with his compass and straightedge. What is he constructing?



1. A perpendicular bisector.
2. An angle bisector.
3. An altitude
4. A line parallel to line $\overbar{PQ}$
5. Complete the construction in #11 by drawing the last step.
6. $y=\frac{1}{4}x+8$
7. $y=-\frac{1}{2}x-2.4$
8. $y=\frac{5}{7}x-5$
9. $y=-\frac{3}{5}x+94$
10. $y=-4x-0.2$
11. $y=x+1$
12. $y=-\frac{1}{2}x$
13. $y=x-3$
14. $y=-\frac{7}{5}x+4.5$
15. $y=\frac{3}{5}x-11$

Use the lines given above to answer the following questions:

1. Which pairs of lines are parallel?
2. Which pairs of lines are perpendicular?
3. Name at least one pair of intersecting lines:
4. Parallel lines have \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ slopes.
5. What is the slope of the line $y=\frac{5}{7}x-12$?
6. Write the equation of a line parallel to $y=2x$.
7. Perpendicular lines have \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ slopes.
8. What is the slope of the line $y=5x+3$?
9. Write the equation of a line perpendicular to $y=-8x+3$.