

Name:

Date:

Hour:

Geometry 9  
Review for PC #2 – Unit 3

Write the equation of the line that passes through the given points.

1.  $(-2, 5)$  and  $(4, 8)$

2.  $(3, -8)$  and  $(1, 0)$

Write the equation of the line that satisfies the given information.

3. Passing thru  $(5, -2)$  and parallel to  $3x - y = 4$

4. Passing thru  $(-6, 3)$  and parallel to  $y = -\frac{1}{2}x + 3$

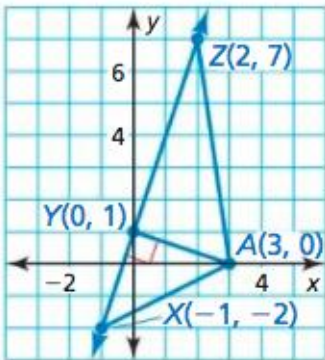
5. Passing thru  $(4, 7)$  and perpendicular to  $2x - 3y = 6$

6. Passing thru  $(-3, 1)$  and perpendicular to  $y = -\frac{3}{4}x - 1$

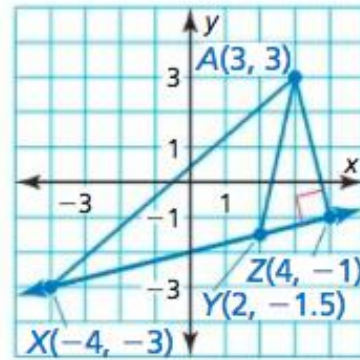
7. Vertical line that passes through  $(-8, 2)$
8. Horizontal line that passes through  $(5, 6)$
9. Vertical line that passes thru  $(5, -1)$
10. Horizontal line that passes thru  $(-2, -4)$

Find the distance from point A to  $\overleftrightarrow{XZ}$ .

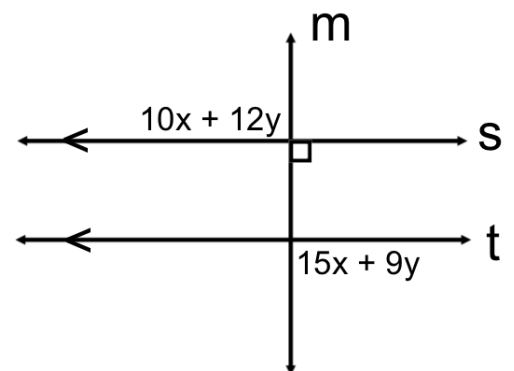
11.



12.



13. Solve for  $x$  and  $y$  in the diagram.



Find the coordinates of point P along the directed line segment AB so that AP to PB is the given ratio.

18. A(8, 0) and B(3, -2) with ratio 1 to 4

19. A(-2, -4) and B(6, 1) with ratio 3 to 2

20. A(1, 6) and B(-2, -3) with ratio 5 to 1

21. Determine if the given lines are parallel, perpendicular or neither.

Line A: (-9, 3), (-5, 7)

Line B: (-11, 6), (-7, 2)

22. Given:  $h \parallel k$  and  $j \perp h$

Prove:  $j \perp k$

