

Name:

Date:

Hour:

Adv. Geometry
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 $y = -\frac{1}{2}x + 3$

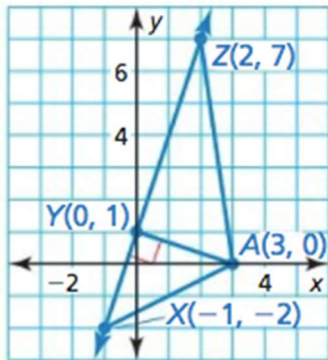
5. Passing thru $(4, 7)$ and perpendicular to $2x - 3y = 6$

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

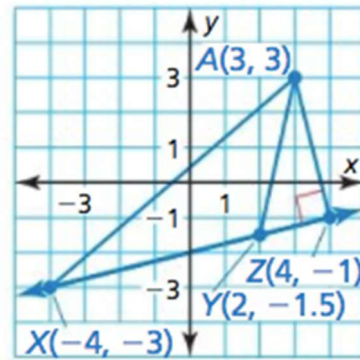
7. Vertical line that passes through $(-8, 2)$
8. Horizontal line that passes through $(5, 6)$
9. Vertical line that passes thru $(5, -1)$
10. Horizontal line that passes thru $(-2, -4)$

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

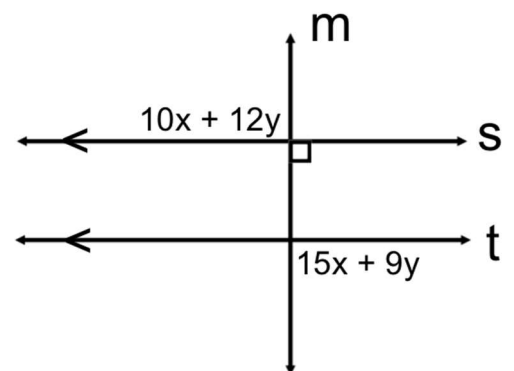
11.



12.



13. Solve for x and y in the diagram.



Write the equation of the line that is the perpendicular bisector to each set of points.

14. A(-4, -2) and B(8, 4)

15. A(-9, 11) and B(-15, 19)

16. A(11, -5) and B(1, -10)

17. A(14, 18) and B(-6, 10)

18. Find the distance from point P(-3, 7) to the line $y = \frac{1}{3}x - 2$.

19. Find the distance from point P(-2, 3) to the line $x - 2y = -2$.

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

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

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

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

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

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

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

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

Prove: $j \perp k$

