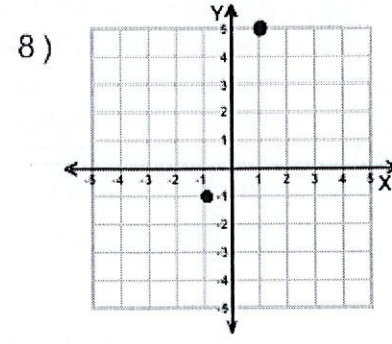
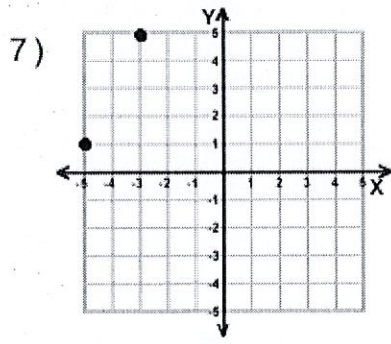
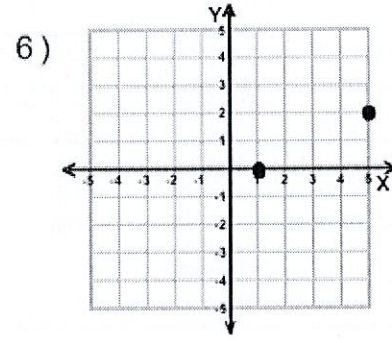
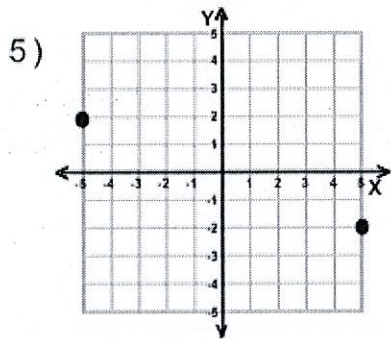
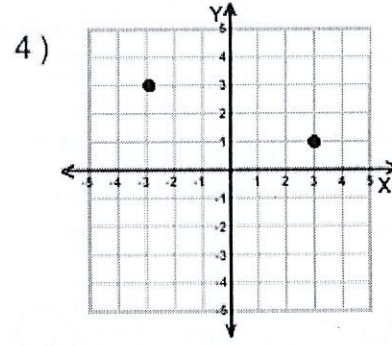
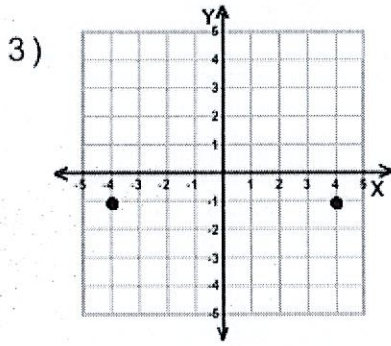
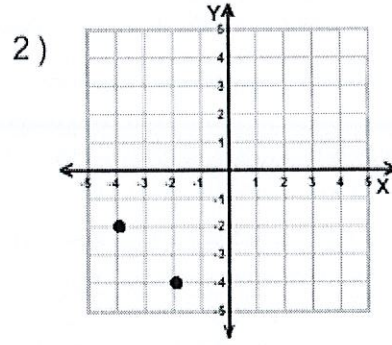
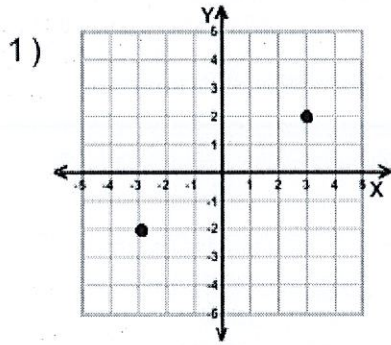


Find the equation of the line of reflection.



For each linear equation write the slope of a line parallel to the given line.

9. $y = 2x + 4$

10. $2x + 4y = 8$

For each linear equation write the slope of a line perpendicular to the given line.

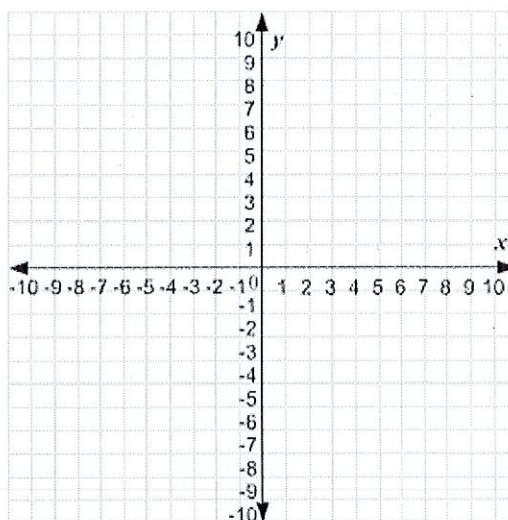
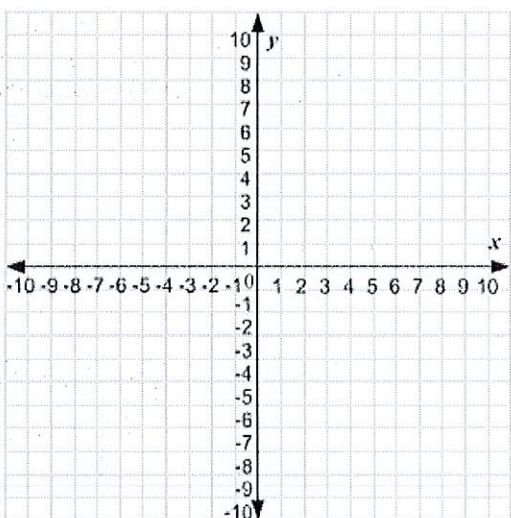
11. $y = -5x + 1$

12. $7y + 4x = 3$

Find the slope and the distance between each pair of points.

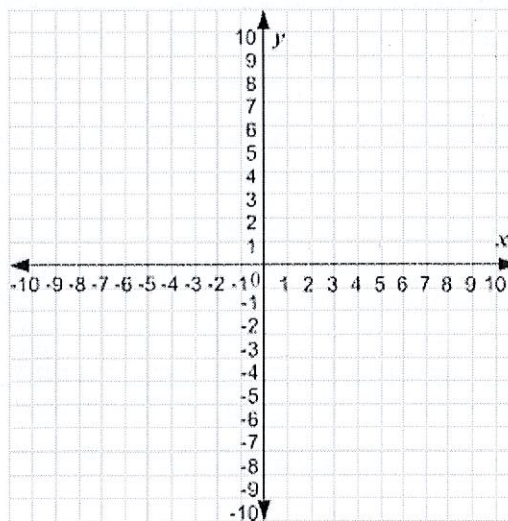
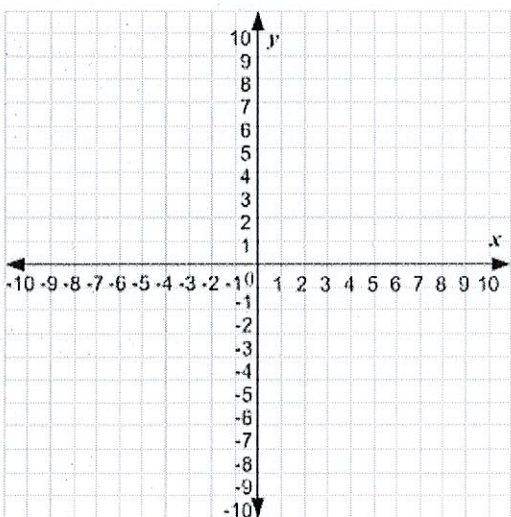
13. $(-4, -1)$ $(6, 7)$ Slope _____ Distance _____

14. $(-1, 1)$ $(3, 4)$ Slope _____ Distance _____

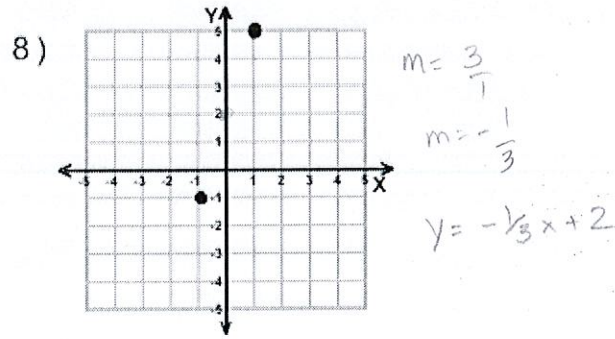
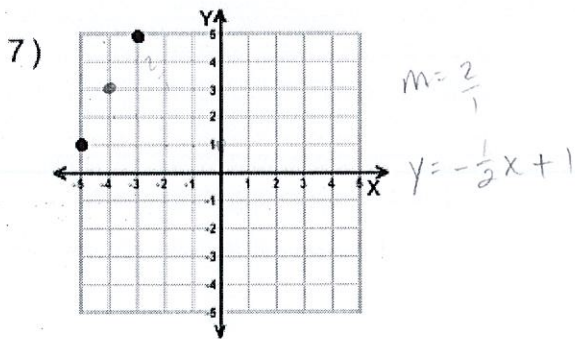
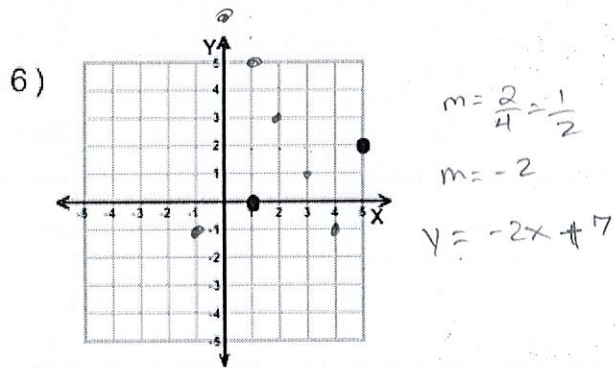
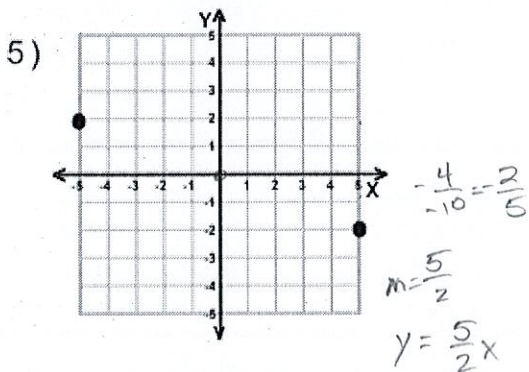
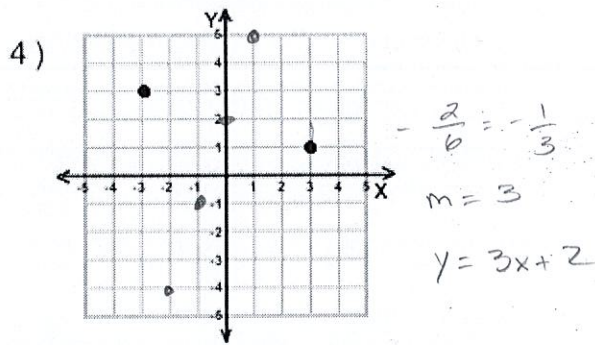
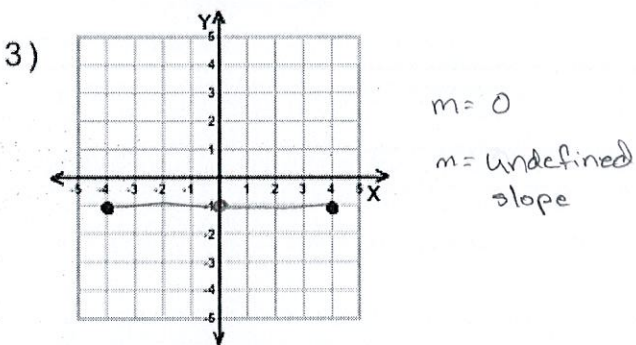
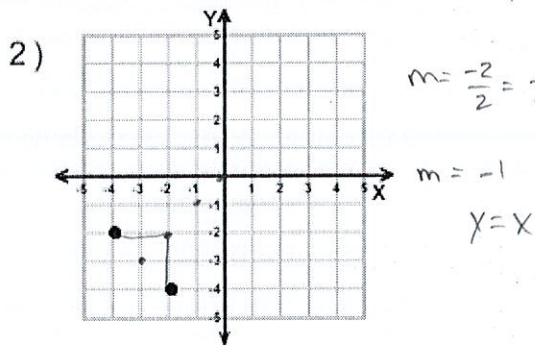
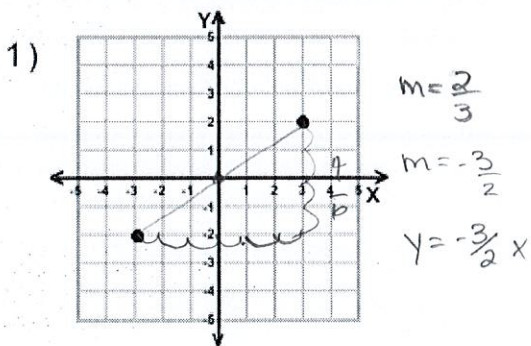


15. $(-5, 5)$ $(1, -2)$ Slope _____ Distance _____

16. $(-2, 4)$ $(0, 3)$ Slope _____ Distance _____



Find the equation of the line of reflection.



For each linear equation write the slope of a line parallel to the given line.

7. $y = 2x + 4$

answers will vary

$y = 2x - 2$

8. $2x + 4y = 8$

$-2x \quad -2x$
 $\frac{4y}{4} = \frac{-2x + 8}{4}$

$y = -\frac{1}{2}x + 2$
 $y = -\frac{1}{2}x$

For each linear equation write the slope of a line perpendicular to the given line.

9. $y = -5x + 1$

answers will vary

$y = \frac{1}{5}x$

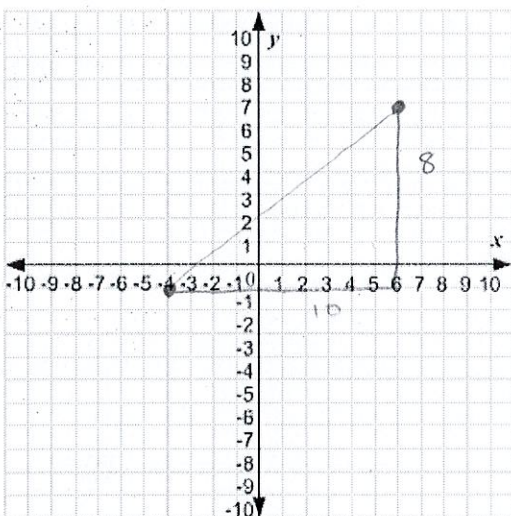
10. $7y + 4x = 3$

$-4x \quad -4x$
 $\frac{7y}{7} = \frac{-4x + 3}{7}$
 $y = -\frac{4}{7}x + \frac{3}{7}$

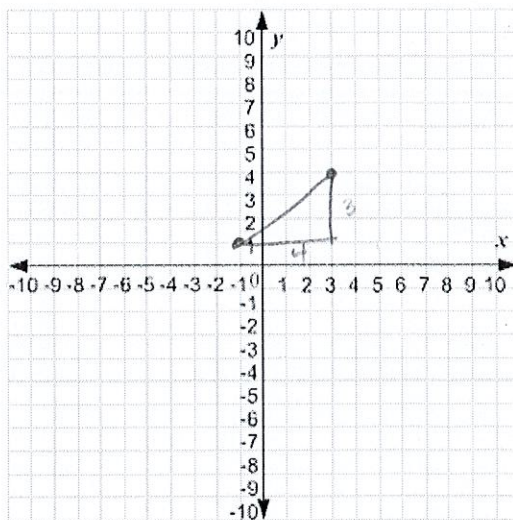
$y = \frac{7}{4}x$

Find the slope and the distance between each pair of points.

11. $(-4, -1)$ $(6, 7)$ Slope $\frac{4}{5}$ Distance 12.8 or $\sqrt{164}$ 12. $(-1, 1)$ $(3, 4)$ Slope $\frac{3}{4}$ Distance 5



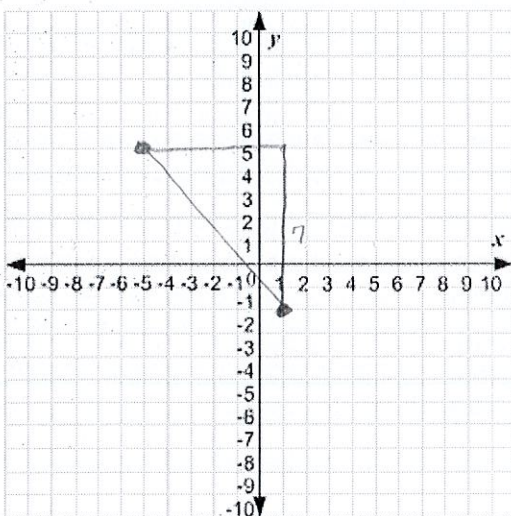
$m = \frac{8}{10} = \frac{4}{5}$
 $8^2 + 10^2 = c^2$
 $64 + 100 = c^2$
 $\sqrt{164} = c$
 $12.8 = c$



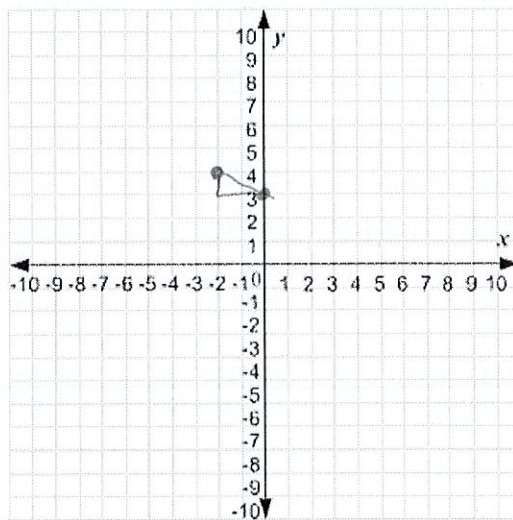
$3^2 + 4^2 = c^2$
 $9 + 16 = c^2$
 $25 = c^2$
 $\sqrt{25} = c$
 $5 = c$

13. $(-5, 5)$ $(1, -2)$ Slope $-\frac{7}{6}$ Distance 9.2

14. $(-2, 4)$ $(0, 3)$ Slope $-\frac{1}{2}$ Distance 2.23 or $\sqrt{5}$



$6^2 + 7^2 = c^2$
 $36 + 49 = c^2$
 $85 = c^2$
 $9.2 = c$



$1^2 + 2^2 = c^2$
 $1 + 4 = c^2$
 $5 = c^2$

