

For problems 1 – 6, find the x and y intercept of each equation.

1. $\frac{1}{3}x + 9y = 9$

2. $14 = -2x + 6y$

3. $8x + 2y = 16$

4. $\frac{2}{5}x + 3y = 15$

5. $Y = 8x - 14$

6. $2y - \frac{1}{2}x = -6$

For problems 7-9, determine if the lines are parallel, perpendicular, or neither.

7. $8x + 2y = 5$
 $4x + y = -10$

8. $y = \frac{3}{2}x - 6$
 $-6x + 4y = 0$

9. $30 = 2y + 16x$
 $y = \frac{1}{8}x - 9$

10. Write an equation in slope-intercept form that is perpendicular to $2x + 3y = 12$ and has the same y-intercept as the equation $-3x + y = 14$.

11. Write an equation in slope-intercept form that is parallel to $4y - 8x = 12$ and has the same y-intercept as the equation $-16 + 2x = y$.

12. Write an equation in slope-intercept form that is parallel to $-6x + 12y = 10$ and goes through the point (1,7).

For problems 13 and 14, write an equation in standard form from the given table.

13.

X	F(x)
0	2
4	5
6	6.5
8	8
10	9.5
12	11

14.

X	Y
-2	9
-1	8
0	5
1	3
2	1
3	-1

15. When the Detroit Road Commission decided to repave the roads, they decided they would only repave roads that had an A-Value larger than or equal to 2, when the road was put into standard form. Given the road map below, figure out which roads will be repaved.

