Name_____Block_____

Write the equation of a line given the x- and y-intercepts

1) $(3,0) and (0,12)$ 2) $(-6,0) and (0,2)$ 3) $(2,0) and (0,-4)$

Write the equation of a line given the slope and the y-intercept

4) $m=-\frac{3}{2}, b=(0,2)$ 5) $m=-1, b=(0,4)$ 6) $m=5, b=(0,-3)$

Write the equation that generated the table below.

7)

x	y
–2	-7
0	-3
1	-1
4	5

8)

x	**y**
-1	$\frac{4}{3}$
3	0
6	-1
12	-3

9)

x	**y**
-4	7
-1	4
2	1
5	-2

State whether the equations are parallel, perpendicular, or neither.

10) $y = 3x - 4$
$y = 17 + 3x$

11) $4x - 7y = 12$
$7x + 4y = 0$

12) $3x - 5y = 1$
$3x + 5y = -3$

13) $y = 2x + 4$
$y = \frac{1}{2}x - 1$

14) $y = -\frac{1}{3}x$
$y = 3x + 7$

15) $2x + 3y = 6$
$2x + 3y = 9$

16) $4x - 7y = 10$
$7x - 4y = -2$

17) $y = \frac{3}{4}x - 2$
$y = \frac{3}{4}x + \frac{1}{2}$

18) $x + 3y = 2$
$3x + 9y = 12$

Write the equation of a line parallel to $y = \frac{1}{2}x + 7$

19) through $(14,-3)$

20) through $(5,2)$

Write the equation of a line perpendicular to $y = \frac{1}{2}x + 7$

21) through $(-4,-4)$

22) through $(3,-5)$