Write the equation of the line (in slope-intercept form) that goes through the given point, and is perpendicular to the given line.

1.
$$(-5,0)$$
 and $y = 5x + 1$

2.
$$(5,3)$$
 and $y = \frac{5}{2}x - 1$

3.
$$(2,0)$$
 and $y = -\frac{2}{5}x - 2$

4.
$$(-5,3)$$
 and $y = \frac{5}{4}x - 4$

5.
$$(1,-2)$$
 and $y = \frac{1}{4}x - 2$

6.
$$(-3, -1)$$
 and $y = -x + 4$

7.
$$(-2,3)$$
 and $y=x+1$

8.
$$(3,-5)$$
 and $y = \frac{1}{3}x + 5$

9.
$$(-1,1)$$
 and $y = -\frac{1}{4}x + 1$

10.
$$(-4,3)$$
 and $y = \frac{1}{2}x + 5$