Perpendicular Lines

Find the equation of a line passing through the given point and perpendicular to the given equation.
Write your answer in slope-intercept form.

1) (-3 , 5) and -5x + 3y = -9 Answer: _____	5) (5 , -3) and $y = -\frac{2}{5}x - 2$ Answer: _____
2) (-1 , 1) and x - y = 12 Answer: _____	6) (-3 , -2) and $y = \frac{5}{2}x - 4$ Answer: _____
3) (3 , -5) and $y = -\frac{7}{6}x + 10$ Answer: _____	7) (-5 , -4) and -x + 4y = -16 Answer: _____
4) (3 , -4) and -2x + 5y = 10 Answer: _____	8) (-5 , 3) and $y = \frac{1}{2}x + 3$ Answer: _____

Perpendicular Lines

Find the equation of a line passing through the given point and perpendicular to the given equation.
Write your answer in slope-intercept form.

1) (-3 , 5) and -5x + 3y = -9 Answer: $y = -\frac{3}{5}x + \frac{16}{5}$	5) (5 , -3) and $y = -\frac{2}{5}x - 2$ Answer: $y = \frac{5}{2}x - \frac{31}{2}$
2) (-1 , 1) and x - y = 12 Answer: $y = -x$	6) (-3 , -2) and $y = \frac{5}{2}x - 4$ Answer: $y = -\frac{2}{5}x - \frac{16}{5}$
3) (3 , -5) and $y = -\frac{7}{6}x + 10$ Answer: $y = \frac{6}{7}x - \frac{53}{7}$	7) (-5 , -4) and -x + 4y = -16 Answer: $y = -4x - 24$
4) (3 , -4) and -2x + 5y = 10 Answer: $y = -\frac{5}{2}x + \frac{7}{2}$	8) (-5 , 3) and $y = \frac{1}{2}x + 3$ Answer: $y = -2x - 7$