

1. Find the equation of a line that is PARALLEL to $y = \frac{1}{2}x - 1$ and goes through the point $(-4, 5)$.

$$y = \frac{1}{2}x + 7$$

2. Find the equation of a line that is PARALLEL to $y = 3x + 8$ and goes through the point $(9, -17)$.

$$y = 3x - 44$$

3. Find the equation of a line that is PARALLEL to $y = -\frac{3}{4}x + 6$ and goes through the point $(-8, -3)$.

$$y = -\frac{3}{4}x - 9$$

4. Find the equation of a line that is PARALLEL to $y = -5x - 9$ and goes through the point $(2, 1)$.

$$y = -5x + 11$$

5. Find the equation of a line that is PARALLEL to $y = 7$ and goes through the point $(3, 2)$.

$$y = 2$$

6. Find the equation of a line that is PERPENDICULAR to $y = \frac{1}{2}x - 1$ and goes through the point $(1, 4)$.

$$y = -2x + 6$$

7. Find the equation of a line that is PERPENDICULAR to $y = 3x + 8$ and goes through the point $(6, 2)$.

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

8. Find the equation of a line that is PERPENDICULAR to $y = -\frac{3}{4}x + 6$ and goes through the point $(-9, 3)$.

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

9. Find the equation of a line that is PERPENDICULAR to $y = -5x - 9$ and goes through the point $(10, -4)$.

$$y = \frac{1}{5}x - 6$$

10. Find the equation of a line that is PERPENDICULAR to $y = -2$ and goes through the point $(6, 3)$.

$$x = 6$$