

Find the equation of each of the following lines:

1. Parallel to $y = 3x + 6$ and through $(-1, -5)$.
2. Perpendicular to $y = \frac{-3}{4}x + 11$, and through $(6, 8)$
3. Parallel to $2x + 3y - 6 = 0$, and through $(-5, 3)$.
4. Through $(3, -1)$ with a slope of $\frac{1}{2}$.
5. With a slope of 2 and passing through $(0, 6)$.
6. Through $(4, 5)$ and $(-1, -1)$
7. Through $(-1, 3)$ and parallel to the line $2x + y = 3$.
8. Perpendicular to $2x - y = 3$ and with a y -intercept of -2 .
9. Parallel to the line $x - 2y + 3 = 0$ and passing through $(3, 2)$.
10. Through $(4, -5)$ and with the same x -intercept as the line $2x + y + 8 = 0$.

Answers:

1. $y = 3x - 2$.

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

3. $y = \frac{-2}{3}x - \frac{1}{3}$

4. $y = \frac{1}{2}x - \frac{5}{2}$

5. $y = 2x + 6$

6. $y = \frac{6}{5}x + \frac{1}{5}$

7. $y = -2x + 1$

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

9. $y = \frac{1}{2}x + \frac{1}{2}$

10. $y = \frac{-5}{8}x - \frac{5}{2}$