

## Writing Equations of Lines

Use either the slope intercept ( $y=mx+b$ ) or point slope ( $y-y_1=m(x-x_1)$ ) formula for each line.

1. Slope = 5; y-intercept = -2
2. Slope =  $\frac{1}{4}$ ; y-intercept = 6
3. Slope = 2; point on line (8, -3)
4. Slope =  $-\frac{2}{3}$ ; point on line (6, -4)
5. Two points on the line (-4, 6) (2, 1)
6. Two points on the line (8, 5) (3, -4)
7. x-intercept (4, 0); y-intercept (0, -5)
8. Parallel to  $y=6x - 11$ ; contains point (-5, 2)
9. Parallel to  $y = \frac{2}{5}x + 6$ ; contains point (8, 11)
10. Perpendicular to  $y = 2x - 7$ ; contains point (-3, 1)
11. Perpendicular to  $y = -\frac{4}{3}x - 8$ ; contains point (-2, 7)
12. Horizontal line through point (-9, 12)
13. Horizontal line through (4, -5)
14. Vertical line through (6, 10)
15. Vertical line through (-7, 11)