## 3.5 & 3.6 – Slope, Parallel, and Perpendicular Lines

Determine the slope of each line.



## Determine the slope of the line that passes through each pair of points.

5. (-3, -4) and (5, -1)

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6. (2, -1) and (5, -3)
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## Find the slope of each line and determine if the lines are parallel, perpendicular or neither.

7.  $\overrightarrow{LM}$  and  $\overrightarrow{NP}$  for L(-2, 2), M(2, 5), N(0, 2), and P(3, -2)

8.  $\overrightarrow{XY}$  and  $\overleftarrow{ZW}$  for X(-2, 5), Y(6, -2), Z(-3, 6), and W(4, 0)

## Write the equation of each line given the following information.

9. slope = 2; y-intercept = -15 in Slope-Intercept Form

10. (-4, 7) and (-2, 1) in Slope-Intercept Form

11. (-4, 2) with slope  $\frac{3}{4}$  in Point-Slope Form

12. (0, -2) and (4, 6) in Point-Slope Form