

Name: _____

College Algebra: Quiz #7 (Solutions)

1. Find an equation for the line passing through the points $(3, 2)$ and $(-1, 6)$.

Solution: We will find the point-slope form of this line. First, using the slope formula, we find that the slope of this line is

$$m = \frac{(6) - (2)}{(-1) - (3)} = -1.$$

Since we know this line passes through (for instance) $(3, 2)$, using the point-slope formula, an equation for this line is

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

We can solve for y to get this equation in slope-intercept form as follows:

$$\boxed{y = -x + 5}$$