- 17.1.1 Find an equation, in standard form, whose graph is a line through (-2,5) and (-5,9).
- 17.1.2 Find the *x*-intercept and *y*-intercept of the line with slope 4 that passes through (-7,2).
- 17.1.3 The distance between (-4,3) and (a,0) is 5. Find all possible values of a.
- 17.1.4 When finding the distance between two points using the distance formula, does it matter which point we call (x_1, y_1) and which we call (x_2, y_2) ? Why or why not?
- 17.1.5 Point *P* is (-5, 2) and point *Q* is (-8, 8).
- (a) Find PQ.
- (b) Find the midpoint of \overline{PQ} .
- (c) Find T such that Q is the midpoint of \overline{PT} .
- 17.1.6 Line k is perpendicular to the graph of 4x 3y + 14 = 0 and passes through (-3,2). Find an equation in standard form whose graph is line k.
- 17.1.7 Show that the graph of y = mx + b, where m and b are constants, has slope m.
- **17.1.8** Show that if the product of the slopes of lines k and ℓ is -1, then $k \perp \ell$.
- **17.1.9** Suppose *A*, *B*, and *C* are constants and $B \neq 0$. Show that the slope of the graph of the equation Ax + By + C = 0 is -A/B.