## Geometry

### 8.2 Pythagorean Theorem

Find the missing side.
1)

2)

3)


Would these lengths form a right triangle?
4) $6,8,10$
5) $7,28,29$
6) $\frac{1}{3}, \frac{2 \sqrt{3}}{3}, 1$
7) Determine whether $\triangle A B C$ is a right triangle for the given vertices. Show work. $\quad A(2,7) \quad B(3,6) \quad C(-4,-1)$ (distance formula and check w/ Pythagorean Theorem)
8) The bottom end of a ramp at a warehouse is 10 feet from the base of the main dock and is 11 feet long. How high is the dock?

9) To support a flag pole, a 50-foot tether is tied to the pole at a point 40 feet above ground. The tether is pulled taut and tied to an anchor in the ground. How far away from the base of the pole is the anchor?

