

Worksheet 13

Name:

1. Each side of a square is increasing at a rate of 6 cm/s. At what rate is the area of the square increasing when the area of the square is 16 cm^2 ?

2. A particle is moving along the curve $y = \sqrt{x}$. As the particle passes through the point $(4, 2)$, its x -coordinate increases at a rate of 3 feet per second. How fast the the distance from the particle to the origin changing at that instant?