Mathematics Assessment Program
College and Career Readiness Mathematics

Short Tasks: Expressing Geometric Properties with Equations 1

1. Find the equation of a circle with centre (2, 1) radius 5.

2. Find the volume of a cone with height 7cm and base diameter 6cm.

3. Find the equation of a line passing through the origin and parallel to the line $2x - y = 5$.

4. If the equation of a line p in the coordinate plane is $y = 3x + 2$, what is the equation of line q which is a reflection of line p in the x-axis?

5. If the slope of a line is $\frac{1}{2}$ and the y-intercept is 3, what is the x-intercept of the same line?