

## Unit 1: Unit Conversions Using Dimensional Analysis Progress Check

Directions: Use dimensional analysis to solve each problem. Show your work. Include a unit with your final answer.

1) Convert 34000 mm to km. mm → m → km

$$34000 \text{ mm} \times \frac{1 \text{ m}}{1000 \text{ mm}} \times \frac{1 \text{ km}}{1000 \text{ m}} = 0.034 \text{ km}$$

2) The driveway to Mrs. Cook's farm is 2400 ft long. How many meters long is her driveway?

ft → in → cm → m

$$2400 \text{ ft} \times \frac{12 \text{ in}}{1 \text{ ft}} \times \frac{2.54 \text{ cm}}{1 \text{ in}} \times \frac{1 \text{ m}}{100 \text{ cm}} = 731.52 \text{ m}$$