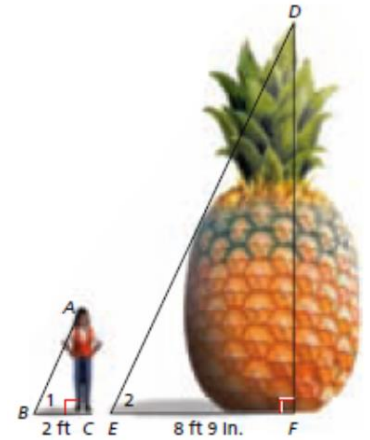


Applied Geometry

Lesson Ch 7 Day 6: Using Proportional Relationships

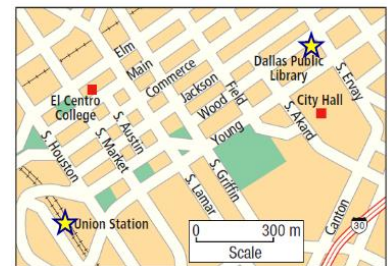
EXAMPLE 1: Measurement Application

A student wanted to find the height of a statue of a pineapple in Nambour, Australia. She measured the pineapple's shadow and her own shadow. The student's height is 5 ft 4 in. What is the height of the pineapple?



EXAMPLE 2: Solving for a Dimension

The scale of this map of downtown Dallas is 1.5 cm : 300 m. Find the actual distance between Union Station and the Dallas Public Library.



EXAMPLE 3: Make a Scaled Drawing

The Lincoln Memorial in Washington, DC, is approximately 57 m long and 36 m wide. Make a scale drawing of the base of the building using a scale of 1 cm : 15 m.



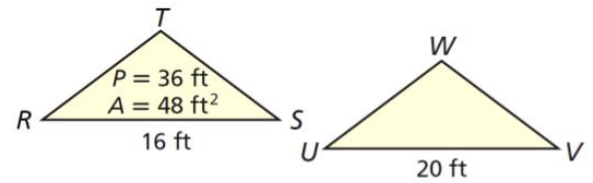
Review:

Similarity Ratio	Perimeter Ratio	Area Ratio

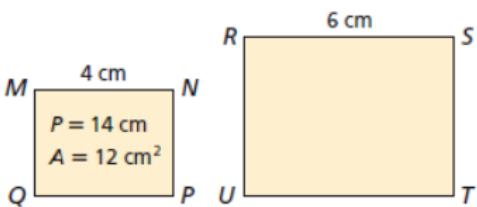
*Make sure the figures meet the definition of similar polygons or a triangle similarity criteria.

EXAMPLE 4: Using Ratios to Find Perimeter and Area

Given that $\triangle RST \sim \triangle UVW$, find the perimeter and the area of $\triangle UVW$.



Given that rectangle MNPQ \sim rectangle RSTU, find the:



- Perimeter of rectangle RSTU
- Area of rectangle RSTU