**ALGEBRA**

**SIMILAR FIGURES**

**Similar figures:**

A

B

C

E

F

G

9

*x*

6

8

$$∆ABC ≅ ∆EFG$$

Find *x*

Z

X

Y

$$∆XYZ ≅ ∆KLM$$

32

20

24

K

M

L

Find LM

**A tree casts a shadow that is 24 ft long. A 6 ft adult casts a shadow that is 40 in long. How tall is the tree?**

**Scale Drawings:**

**Scale:**

**A map has a scale of 1 in = 25 mi. The distance between two cities on the map is 4 ½ in. What is the actual distance?**

**A model train is built at a scale of 1 in: 3 ft. If the engine is 8 ¾ in long, how long is the actual engine?**