

Predicting Shapes to Scale

Name: _____

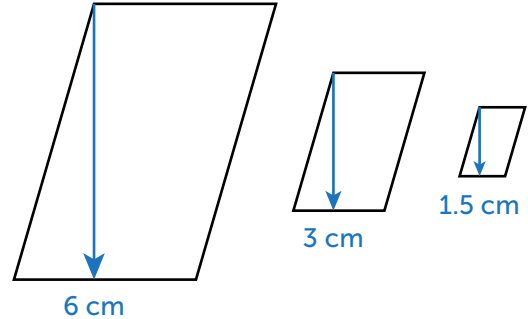
Date: _____

Scale is the amount a measurement is multiplied by to create proportional model. For instance, if you have two proportional (with identical internal angles) rhombuses of different heights like these:

The larger rhombus is 2x the height of the smaller rhombus, or 2x scale of the smaller one.

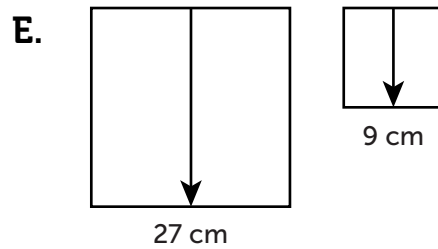
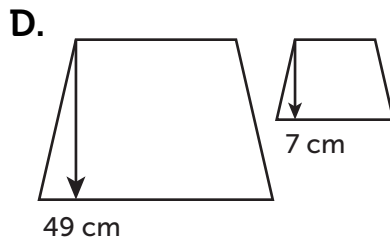
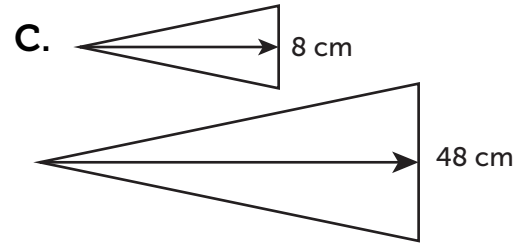
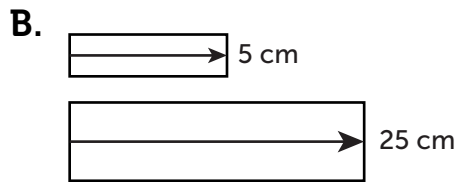
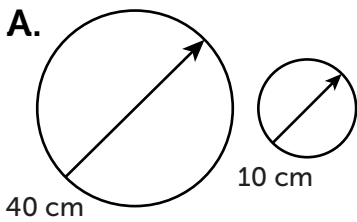
Conversely, the smaller rhombus is $\frac{1}{2}$ x the height of the larger rhombus, or $\frac{1}{2}$ x scale of the larger one.

To continue the pattern, predicting other shapes in the series is as easy as multiplying the dimensions by 2 or $\frac{1}{2}$. What do you notice about the third shape from the right:



Exercises

Directions: Predict dimensions of the next shape in a set. The first exercise is done for you.



	Shape Set	Prediction
1.	A	120 cm and/or 2.5 cm
2.	B	125 cm and/or 1 cm
3.	C	288 cm and/or 1/3 cm
4.	D	343 cm and/or 1 cm
5.	E	81 cm and/or 3 cm