Name:	Date:	Class:	

Scaling a Figure Worksheet

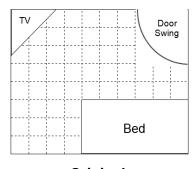
Learning Goal: How does a figure or shape change when we enlarge or reduce it?

Introduction

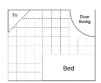
Below is floor plan for the interior design of a bedroom. Let's look at what happens to the items in the design when we enlarge or reduce them.

Instructions

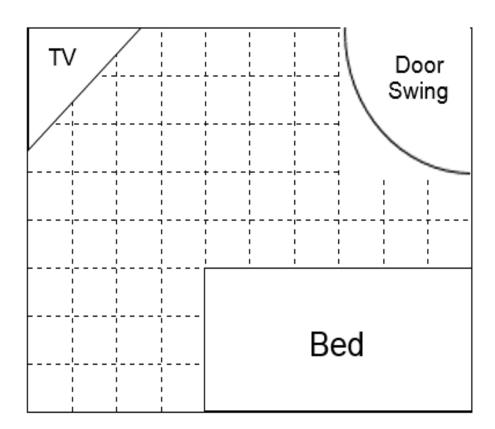
- 1. Measure and record the size and length of each part of the bedroom for the original, enlarged and reduced designs.
- 2. Calculate the perimeter and area for each design.
- 3. Answer the questions below.



Original



Reduced



Enlarged

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Data Collection

1. Record your measurements and calculations for the *bedroom* in the table below.

Bedroom	Length	Width	Perimeter	Area	Angles
Original					
Enlarged					
Reduced					

2. Record your measurements and calculations for the *door swing* (quarter circle) below.

Door Swing	Radius	Circumference	Area	Angle
Original				
Enlarged				
Reduced				

3. Record your measurements and calculations for the *TV* in the table below.

TV	Length	Width	Perimeter	Area	Angles
Original					
Enlarged					
Reduced					

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	Questions Answer the following questions based on your r	neasurements a	nd calculations.
	 By how much was the design enlarged? How area? The angles? Explain. 		
2.	2. By how much was the design reduced? How area? The angles? Explain.	do you know? I	How did that change the perimeter? The
3.	3. If we were to draw a new design at quadrup change? How would the area change? The a		he size, how would the perimeter
4.	 Which characteristics of a figure change who size? Which characteristics stay the same? Example 1. 		s scaled? How can you predict their new
	Size: Willen characteristics stay the same: E	жріані.	