

What's My Scale Factor?

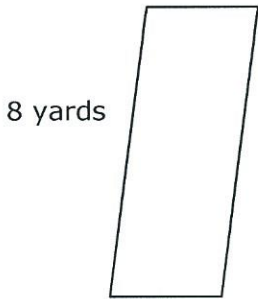
1. One of the side lengths of the dilated triangle has been provided. Measure and record each dilated side length to the nearest half centimeter and record in the table.
2. Cut apart **What's My Scale Factor? Cards** and match the appropriate triangle and scale factor card to its dilated side length.
3. Sketch the other two sides of the dilated triangle and label the missing height or base.

Original Triangle	Scale Factor	Sketch of the Dilated Triangle
		$h = \underline{\hspace{2cm}}$
		$h = \underline{\hspace{1cm}}$
		_____ $b = \underline{\hspace{2cm}}$
		_____ $b = \underline{\hspace{2cm}}$

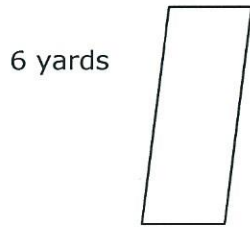
Scale Factor*

- Circle if the dilation is an enlargement or reduction for Problems 1–3.
- Determine the ratio of the corresponding sides and the scale factor used to generate each new figure.

1. Original



New



Enlargement or Reduction

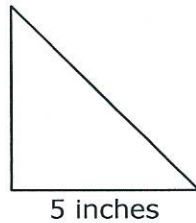
$$\frac{\text{New}}{\text{Original}} = \underline{\hspace{2cm}}$$

Scale Factor = _____

2. Original



New



Enlargement or Reduction

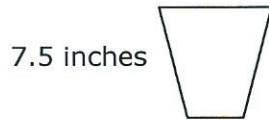
$$\frac{\text{New}}{\text{Original}} = \underline{\hspace{2cm}}$$

Scale Factor = _____

3. Original



New

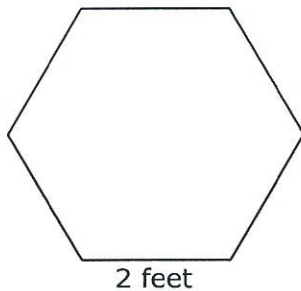


Enlargement or Reduction

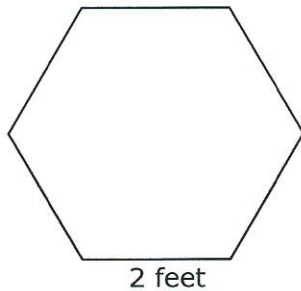
$$\frac{\text{New}}{\text{Original}} = \underline{\hspace{2cm}}$$

Scale Factor = _____

4. Original



New



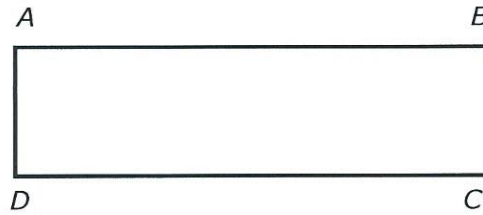
$$\frac{\text{New}}{\text{Original}} = \underline{\hspace{2cm}}$$

Scale Factor = _____

How is Problem 4 different from Problems 1–3?

The scale factor for Problem 4 is _____ because _____

3. Rectangle $ABCD$ is dilated by a scale factor of $1\frac{1}{2}$ to create a new rectangle. Use your ruler to measure the length of side AB to the nearest half inch.



Which segment could represent the corresponding side length of the dilated rectangle?

- A
- B
- C
- D

4. Mr. Berry placed a shape of a right isosceles triangle on the document camera in the math classroom. The document camera dilated the triangle's image on the screen by a scale factor of 3.5. If the length of a leg of the original triangle is 4 centimeters, what is the length in centimeters of a leg of the dilated triangle on the screen?

Record your answer and fill in the bubbles. Be sure to use the correct place value.

				•		
0	0	0	0		0	0
1	1	1	1		1	1
2	2	2	2		2	2
3	3	3	3		3	3
4	4	4	4		4	4
5	5	5	5		5	5
6	6	6	6		6	6
7	7	7	7		7	7
8	8	8	8		8	8
9	9	9	9		9	9