

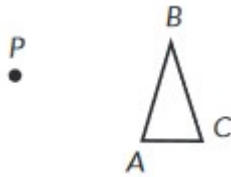
Module 1: Topic 2 Lesson 1 Assignment—Pinch-Zoom Geometry

VOCABULARY----For questions 1-4, complete the following sentences with the correct term. Use your book to help you.

1. A DILATION is a transformation that produces a figure that **is** the same _____ as the original figure, **but not** necessarily the same _____. (page M1-112)
2. The _____ is the ratio of the distance of the new figure from the center of dilation to the distance of the original figure. (page M1-112)
3. When a scale factor is greater than 1, the new figure is called an _____. (page M1-112)
4. When a scale factor is less than 1, the new figure is called a _____. (page M1-114)
5. When you dilate a figure, you create a _____ figure. When two figures are similar, the ratios of their _____ side lengths are equal. (page M1-117)

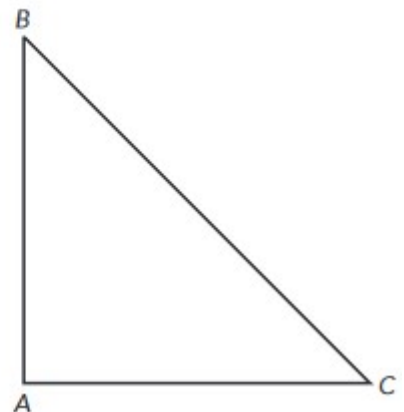
PRACTICE----For questions 6 & 7, dilate each triangle with *P* as the center of dilation and the given scale factor.

6. Scale factor of 3.



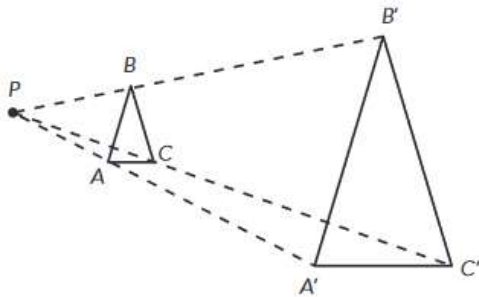
7. Scale factor of $\frac{1}{4}$

P



8. The triangles in each pair are similar. Identify the congruent corresponding angles and the corresponding proportional side lengths.

a. Triangle ABC is similar to Triangle A' B' C' .



Corresponding Angle Pairs

Corresponding Side Lengths

$\angle \underline{\hspace{1cm}} \cong \angle \underline{\hspace{1cm}}$

$\angle \underline{\hspace{1cm}} \cong \angle \underline{\hspace{1cm}}$

$\angle \underline{\hspace{1cm}} \cong \angle \underline{\hspace{1cm}}$

$\underline{\hspace{1cm}} = \underline{\hspace{1cm}} = \underline{\hspace{1cm}}$

9. Triangle DEF is similar to Triangle D' E' F' .

a. Using 3 different colored highlighters, show the corresponding side lengths of TRIANGLE DEF and TRIANGLE D' E' F' .

b. Is this dilation a/an: (circle one)

ENLARGEMENT or REDUCTION

How do you know? _____

c. What is the scale factor of the dilation. (show measurements and ratio).

$k = \underline{\hspace{2cm}}$

