**Name \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Date\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Period\_\_\_\_\_\_\_\_\_\_\_**

Dilations and Scale Factor

*Read the question and choose the appropriate response.*

**1.** $∆ ABC$ is dilated to form$ ∆DEF$. If $\overline{DE}:\overline{AB}=3:1$, which of the following statements would be true?

A. This dilation is an enlargement.

B. This dilation is a reduction.

C. The two triangles are congruent.

**2.** $∆ QRS$ is dilated to form$ ∆TUV$. If $\overline{UV}:\overline{RS}=2:1$, which of the following statements would be true?

A. This dilation is an enlargement because $∆ QRS$ is 2 times larger than $∆ TUV$.

B. This dilation is an enlargement because $∆ QRS$ is $\frac{1}{2}$ the size of $∆ TUV$.

C. This dilation is a reduction because $∆ QRS$ is 2 times larger than $∆ TUV$.

D. This dilation is a reduction because $∆ QRS$ is $\frac{1}{2}$ the size of $∆ TUV$.

**3.** $∆ ABC$ is dilated to form$ ∆DEF$. If $\overline{DE}:\overline{AB}=1:3$, which of the following statements would be true?

A. This dilation is an enlargement because $∆ ABC$ is 3 times larger than $∆ DEF$.

B. This dilation is an enlargement because $∆ ABC$ is $\frac{1}{3}$ the size of $∆ DEF$.

C. This dilation is a reduction because $∆ ABC$ is 3 times larger than $∆ DEF$.

D. This dilation is a reduction because $∆ ABC$ is $\frac{1}{3}$ the size of $∆ DEF$.

**4.** Rectangle *ABCD* is enlarged to form rectangle *A’B’C’D’*. Which of the following statements could NOT be true?

A. The ratio of $\overline{BC}:\overline{B'C'}=1:3$.

B. The two rectangles are similar.

C. The width of rectangle *ABCD* is 4 inches and the width of *A’B’C’D’* is 12 inches.

D. The length of rectangle *ABCD* is 8 inches and the width of *A’B’C’D’* is 2 inches.