8-1 Opener - Dilations

Name: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Date:\_\_\_\_\_\_\_\_ Period:\_\_\_\_\_\_\_\_

1. Determine whether the dilation from the figure on the left to the figure on the right is an enlargement or a reduction. Then find the scale factor of the dilation.

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1. *F*or each set of triangle vertices, find the coordinates of the vertices of the image after a dilation of the triangle by the given scale factor.

*A*(–4, 4), *B*(4, 4), *C*(4, –2), *k* = 0.5

8-1 Exit Slip - Dilations

Name: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Date:\_\_\_\_\_\_\_\_ Period:\_\_\_\_\_\_\_\_

1. Determine whether the dilation from the figure on the left to the figure on the right is an enlargement or a reduction. Then find the scale factor of the dilation.

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1. *F*or each set of triangle vertices, find the coordinates of the vertices of the image after a dilation of the triangle by the given scale factor.

*T*(–1, –3), *U*(–4, –4), *V*(–3, –2), *k* = 2

8-2 Opener – Similar Polygons

Name: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Date:\_\_\_\_\_\_\_\_ Period:\_\_\_\_\_\_\_\_

1. ****Determine whether each pair of figures is similar. If so, find the scale factor. Explain your reasoning.

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1. Each pair of polygons is similar. Find the value of x.

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8-2 Exit Slip – Similar Polygons

Name: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Date:\_\_\_\_\_\_\_\_ Period:\_\_\_\_\_\_\_\_

1. ****Determine whether each pair of figures is similar. If so, find the scale factor. Explain your reasoning.

****

1. Each pair of polygons is similar. Find the value of x.

****

8-3 Opener – Similar Triangles: AA Similarity

Name: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Date:\_\_\_\_\_\_\_\_ Period:\_\_\_\_\_\_\_\_

1. ****Determine whether each pair of triangles is similar. Explain your reasoning.

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8-3 Exit Slip – Similar Triangles: AA Similarity

Name: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Date:\_\_\_\_\_\_\_\_ Period:\_\_\_\_\_\_\_\_

1. Determine whether each pair of triangles is similar. Explain your reasoning.

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8-4 Opener – Similar Triangles: SSS and SAS Similarity

Name: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Date:\_\_\_\_\_\_\_\_ Period:\_\_\_\_\_\_\_\_

1. Determine whether each pair of triangles is similar. Explain your reasoning.

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1. Identify the similar triangles. Then find the value of x. Round your answer to the nearest tenth, if necessary.

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8-4 Exit Slip – Similar Triangles: SSS and SAS Similarity

Name: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Date:\_\_\_\_\_\_\_\_ Period:\_\_\_\_\_\_\_\_

1. Determine whether each pair of triangles is similar. Explain your reasoning.

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1. Identify the similar triangles. Then find the value of x. Round your answer to the nearest tenth, if necessary.

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8-5 Opener – Triangle Proportionality

Name: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Date:\_\_\_\_\_\_\_\_ Period:\_\_\_\_\_\_\_\_

1. Use the figure to answer the question.

****If *NL* = 3, *KL* = 12, and *KJ* = 16, find *KP.*

1. DF, FG, and GD are midsegments of ∆ABC. Find the value of x.

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8-5 Exit Slip – Triangle Proportionality

Name: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Date:\_\_\_\_\_\_\_\_ Period:\_\_\_\_\_\_\_\_

1. Use the figure to answer the question.

****If *KP* = 24, *PJ* = 8, and *NL* = 7, find *KL.*

1. DF, FG, and GD are midsegments of ∆ABC. Find the value of x.

****

 8-6 Opener – Parts of Similar Triangles

Name: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Date:\_\_\_\_\_\_\_\_ Period:\_\_\_\_\_\_\_\_

1. Each pair of triangles is similar. Find the value of x.

1. **** If ∆JKL~∆ZYX, KN is an altitude of ∆*JKL,* YW is an altitude of ∆*ZYX, JK* = 22, *KN* = 18, and *YW* = 15, find *ZY.*
2. Find the value of each variable to the nearest tenth.



 8-6 Exit Slip – Parts of Similar Triangles

Name: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Date:\_\_\_\_\_\_\_\_ Period:\_\_\_\_\_\_\_\_

1. ****Each pair of triangles is similar. Find the value of x.

1. If ∆ABC~∆FGH, BD is an altitude of ∆*ABC,* GK is an altitude of ∆*FGH, AB* = 4, *BD* = 3, and *FG* = 6, find *GK.*

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1. Find the value of each variable to the nearest tenth.