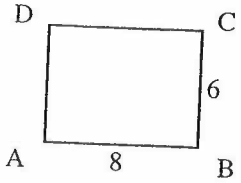
Day 5

Problems Show/justify answers
how

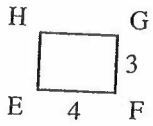
Determine the scale factor for each pair of similar figures in problems 1 through 4.

1.

Original

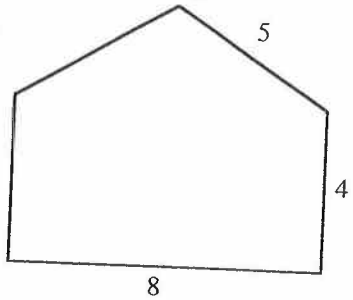


New



2.

Original



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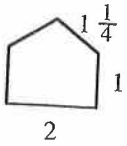
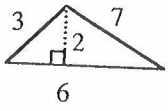


3.

Original



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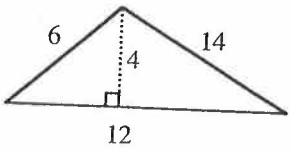
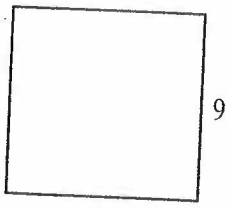


4.

Original



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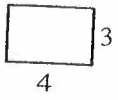


5. A triangle has sides 5, 12, and 13. The triangle was enlarged by a scale factor of 300%.
   a. What are the lengths of the sides of the new triangle?
   b. What is the ratio of the perimeter of the new triangle to the perimeter of the original triangle?

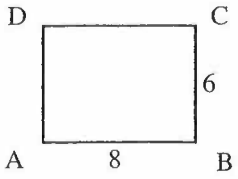
6. A rectangle has a length of 60 cm and a width of 40 cm. The rectangle was reduced by a scale factor of 25%.
   a. What are the dimensions of the new rectangle?
   b. What is the ratio of the perimeter of the new rectangle to the perimeter of the original rectangle?

Problems

Determine the scale factor for each pair of similar figures in problems 1 through 4.

1.

Original



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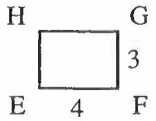
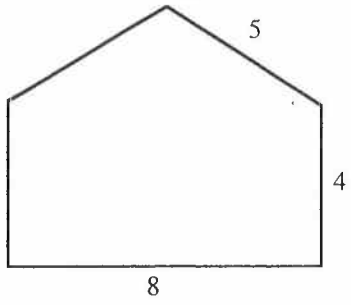


2.

Original



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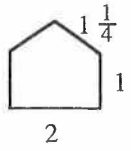
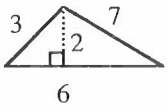


3.

Original



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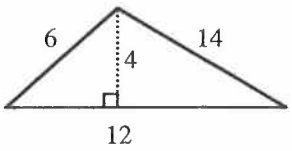
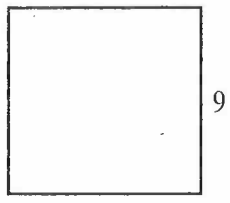


4.

Original



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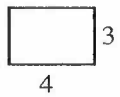

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Answers

1. $\frac{4}{8} = \frac{1}{2}$
2. $\frac{2}{8} = \frac{1}{4}$
3. $\frac{2}{1}$
4. $\frac{1}{3}$
5. a. 15, 36, 39 b. $\frac{3}{1}$
6. a. 15 cm and 10 cm b. $\frac{1}{4}$