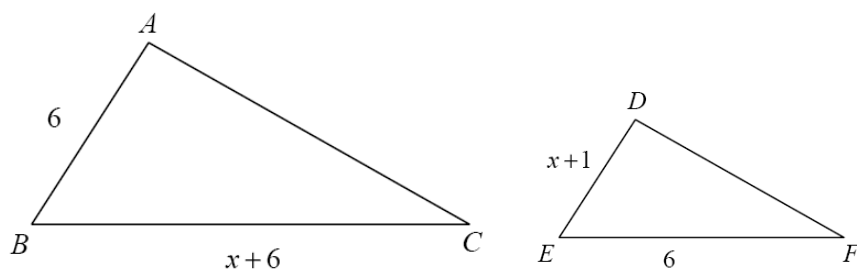


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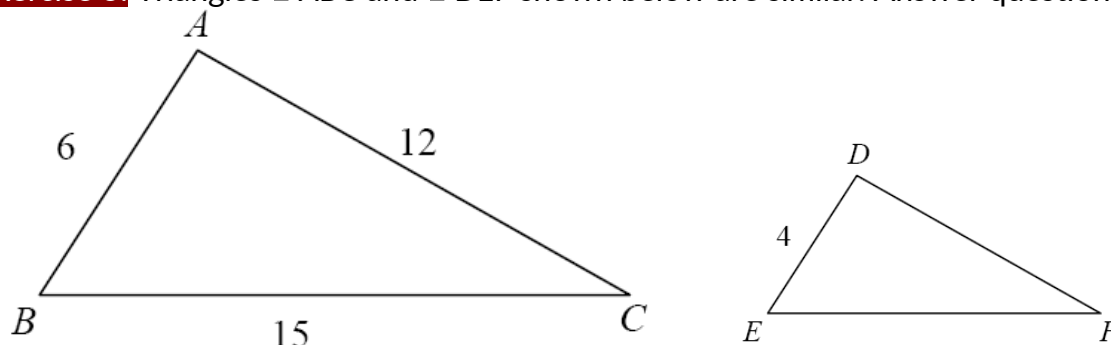
Similar Triangles

Exercise 1: The measures of the sides of a triangle are 4, 7, and 10 inches long. If the longest side of a similar triangle is 25 inches, find the length of the shortest side of that triangle.

Exercise 2: In the following diagram $\triangle ABC \sim \triangle DEF$. The sides have measures as indicated in terms of x . Find the value of x .

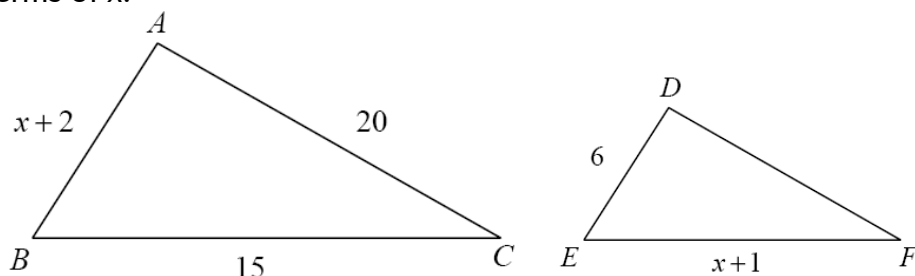


Exercise 3: Triangles $\triangle ABC$ and $\triangle DEF$ shown below are similar. Answer questions 1 till 4.



- 1) Find the lengths of sides EF and DF .
- 2) What is the perimeter of $\triangle DEF$?
- 3) How does the ratio of the perimeter of $\triangle DEF$ to the perimeter of $\triangle ABC$ compare to the ratio of corresponding sides?
- 4) If $m\angle A = 108$, find $m\angle D$.

Exercise 4: In the following diagram, $\triangle ABC \sim \triangle DEF$. The sides have measures as indicated in terms of x .



- 1) Find the value of x .
- 2) Find the length of side DF .