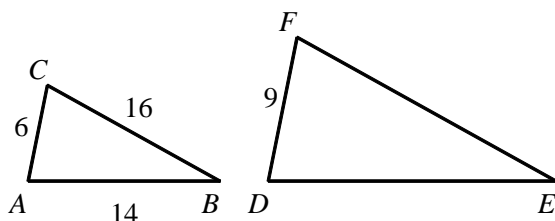
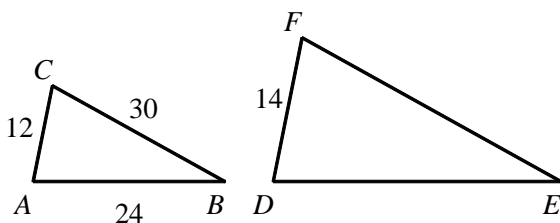


*P.I. G.G.45: Investigate, justify, and apply theorems about similar triangles*

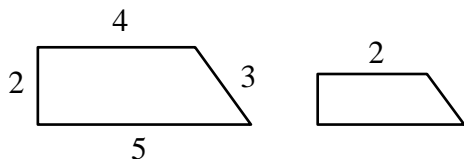
1. The perimeter of  $\triangle PQR$  is 75,  $PQ = 25$ ,  $\triangle PQR \sim \triangle STU$ , and  $ST = 30$ . What is the perimeter of  $\triangle STU$ ?
2. The perimeter of  $\triangle PQR$  is 64,  $PQ = 24$ ,  $\triangle PQR \sim \triangle STU$ , and  $ST = 30$ . What is the perimeter of  $\triangle STU$ ?
3. Find the perimeter of  $\triangle DEF$  if  $\triangle ABC \sim \triangle DEF$ .



4. Find the perimeter of  $\triangle DEF$  if  $\triangle ABC \sim \triangle DEF$ .



5. If the figures below are similar, what is the perimeter of the smaller figure?



[A] 6

[B] 7

[C] 14

[D] 10

6. Two pentagons are similar. The perimeter of one is 42 m and that of the other is 105 m. Find the ratio of the sides of the pentagons.

[A] 2.5

[B] 1:2.5

[C] 1:6.25

[D] 1:2

Geometry Practice: G.G.45 #6

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[1] 90

[2] 80

[3] 54

[4] 77

[5] B

[6] B