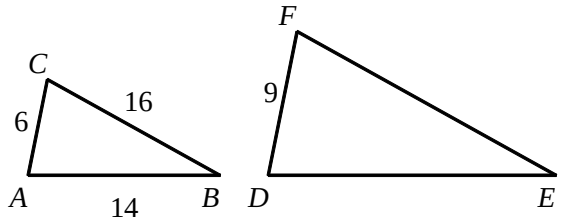
NAME:_____

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

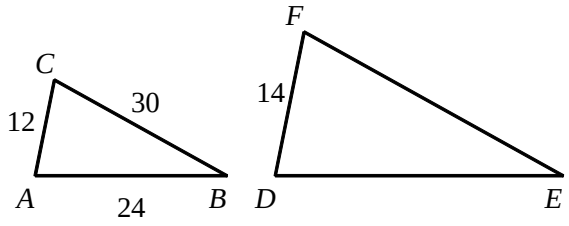
1. The perimeter of ΔPQR is 75, $PQ = 25$, $\Delta PQR \sim \Delta STU$, and $ST = 30$. What is the perimeter of ΔSTU?

2. The perimeter of ΔPQR is 64, $PQ = 24$, $\Delta PQR \sim \Delta STU$, and $ST = 30$. What is the perimeter of ΔSTU?

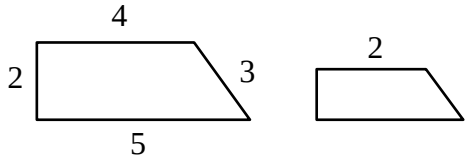
3. Find the perimeter of ΔDEF if $\Delta ABC \sim \Delta DEF$.



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



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

[1] 90

[2] 80

[3] 54

[4] 77

[5] B

[6] B