Grade 8
Homework

Perimeter of Similar Triangles
Do Work on Sheet

1) The ratio of the lengths of two corresponding sides of two similar polygons is $^{6}/_{5}$. What is the ratio of the perimeters?

2) The lengths of the sides of a triangle are 8, 10, and 12. If the length of the shortest side of a similar triangle is 6, find the length of its longest side.

3) The sides of a triangle measure 7, 9, and 11. Find the perimeter of a similar triangle in which the shortest side has a length of 21.

4) Two triangles are similar. The sides of the smaller triangle have length 6, 7, and 12. The perimeter of the larger triangle is 75. The length of the longest side of the larger triangle is:

1) 18 2) 2 3) 36 4) 4

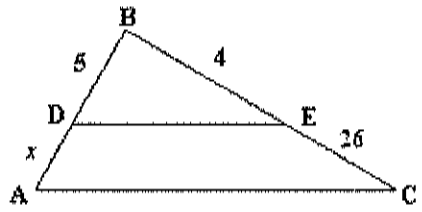
5) The sides of a triangle measure 5 m, 12 m, and 13 m. Find the perimeter of a similar triangle in which the longest side measures 39 meters.

9) The lengths of corresponding sides of two similar polygons are in the ratio 5:8. If the perimeter of the larger polygon is 40 inches, find the perimeter of the smaller polygon.

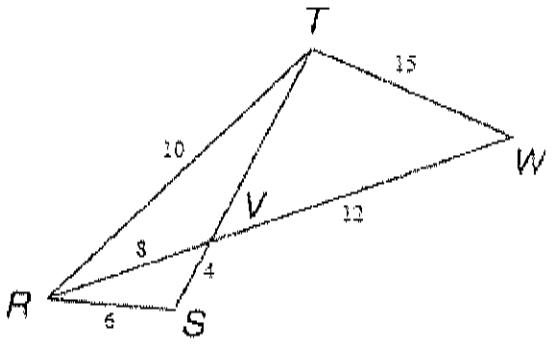
Continue with the work on the back

10) The lengths of the corresponding sides of two similar polygons are in the ratio 3:1. If the perimeter of the larger polygon is 72 millimeters, find the perimeter of the smaller polygon.

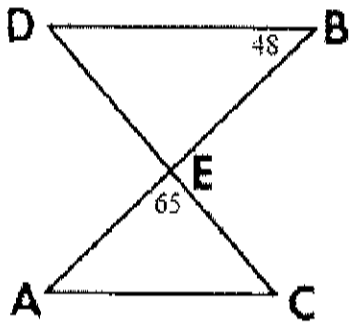
12) In the accompanying diagram of ΔABC, $\overline{DE} \parallel \overline{AC}$, BD = 5, BE = 4, and EC = 26. Find the value of AD.



13) Is $\Delta RVS \sim \Delta RWT$?



14) If DB || AC, is $\Delta DBE \sim \Delta CAE$?



What is the measure of <BDE?