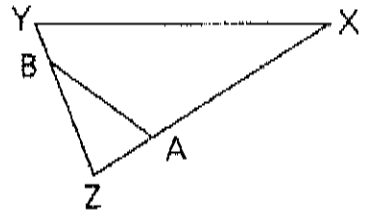
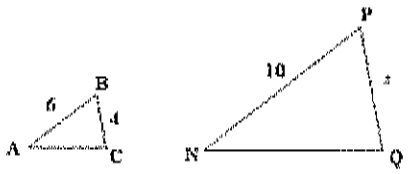
Grade 8
Homework

Finding Missing Sides of Similar Triangles
Do Work on Sheet

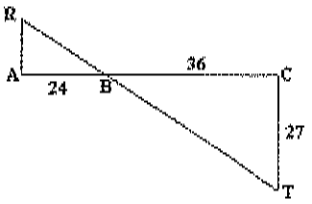
1) $\Delta XYZ \sim \Delta BAZ$, if $BZ = 8$, $YZ = 12$, and $AZ = 2$, find XZ.



2) $\Delta ABC \sim \Delta NQP$. Find PQ



3) In the following diagram $\overline{RA} \perp \overline{AC}$, and $\overline{CT} \perp \overline{AC}$. Find RA



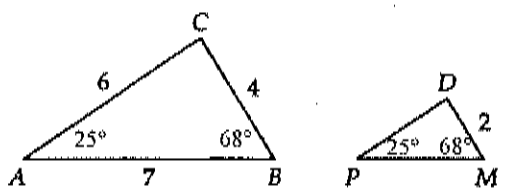
4) The lengths of the sides for a triangle are 36, 30, and 18. If the longest side of a similar triangle is 9, what is the length of the shortest side of this triangle?

5) A certain tree casts a shadow 9.4 meters long. At the same time a nearby boy 2 m tall casts a shadow 4 m long. Find the height of the tree.

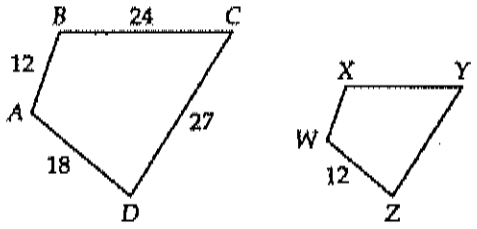
Continue with the work on the back

6) A building casts a shadow 18 feet long. At the same time a woman 5 feet tall casts a shadow 3 feet long. Find the number of feet in the height of the building.

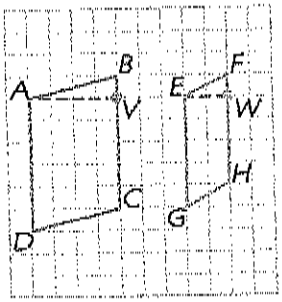
7) Find the lengths of PD and PM.



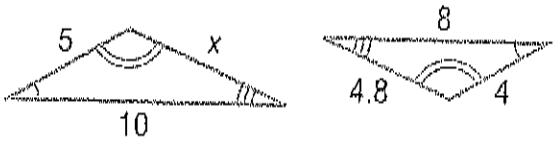
8) ABCD ~ WXYZ. Find WX, XY, and YZ



9) Are the following polygons similar?



10) Find x.



11) Estimate $\sqrt[3]{250}$

12) Evaluate $k^4 \cdot m$ if m = 2 and k = -2