7-3 Similar Triangles: Perimeter and Altitude

Name _____

_____ 1. If $\triangle ABC \sim \triangle XYZ$, AB = 6, BC = 10, AC = 14, and XY = 9.
What is the perimeter of $\triangle XYZ$?

_____ 2. If $\triangle ABC \sim \triangle XYZ$, AB =2, BC = 5, AC = 9, and XY = 8.
What is the perimeter of $\triangle XYZ$?

_____ 3. $\triangle ABC \sim \triangle XYZ$ with $\overline{AD}$ being the altitude of $\triangle ABC$ and $\overline{XN}$ being the altitude of $\triangle XYZ$. If AB = 8, AD = 10, BC = 12, and YZ = 10, what is XN?

_____ 4. $\triangle ABC \sim \triangle DEF$. $\overline{BG}$ is a median of $\triangle ABC$, and $\overline{EH}$ is a median of $\triangle DEF$.
If BC = 30, BG = 15, and EF = 15, what is EH?

_____ 5. $\triangle STR \sim \triangle XYZ$. If the perimeter of $\triangle STR$ is 38 with XY = 6 and ST =12,
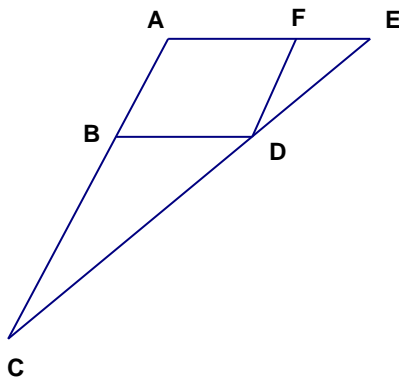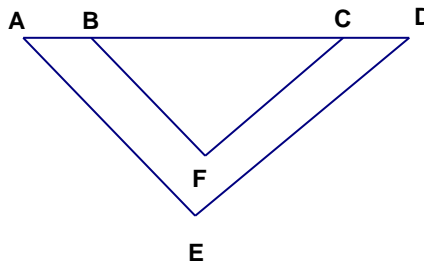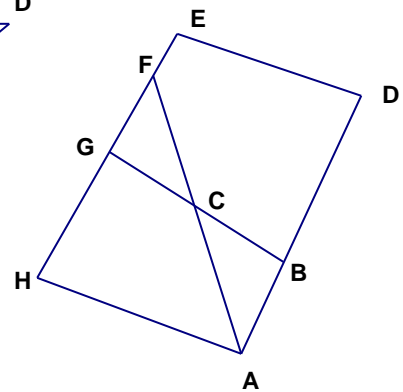what is the perimeter of $\triangle XYZ$?

Figure 1　　　　　**Figure 2**　　　　　**Figure 3**

_____ 6. In figure 1 above, $\triangle BCD \sim \triangle FDE$, CD = 12, FD = 5, FE = 4, and DE = 8.
What is the perimeter of $\triangle BCD$?

_____ 7. In figure 2 above, $\triangle BCF \sim \triangle ADE$, BC = 24, FB = 12, CF = 18, and DE = 21.
What is the perimeter of $\triangle ADE$?

_____ 8. In figure 3 above, $\triangle ABC \sim \triangle FGC$, EDAH is a parallelogram, CG = 7, CA = 6,
CB = 10, and BA = 11. What is the perimeter of $\triangle FGC$?