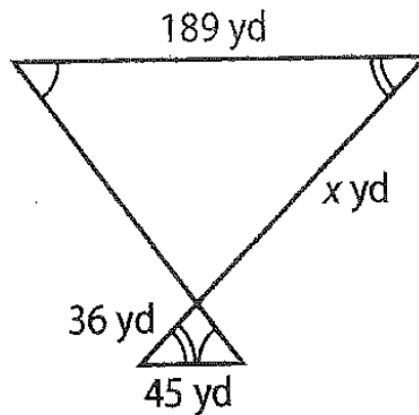
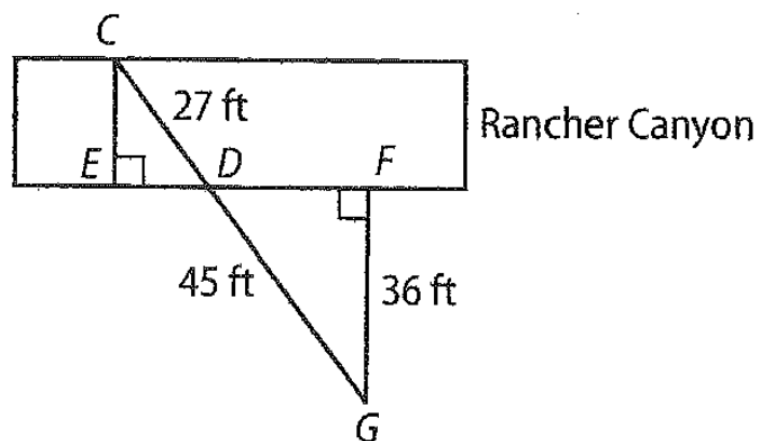


SIMILAR FIGURES AND INDIRECT MEASUREMENT

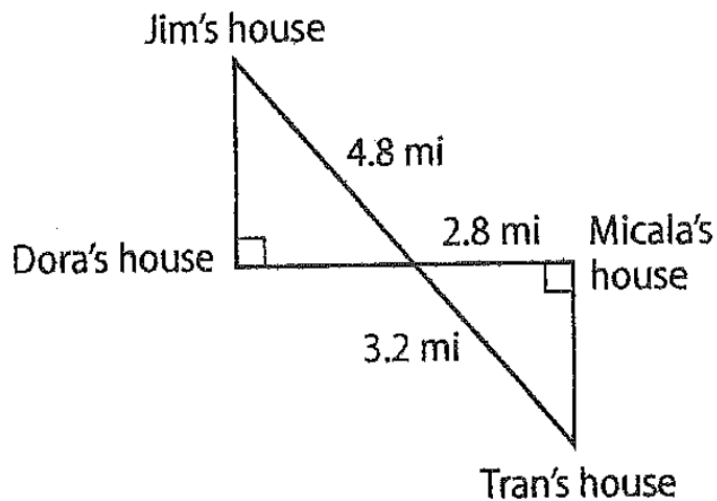
1. The triangles below are similar. What is the value of x ?



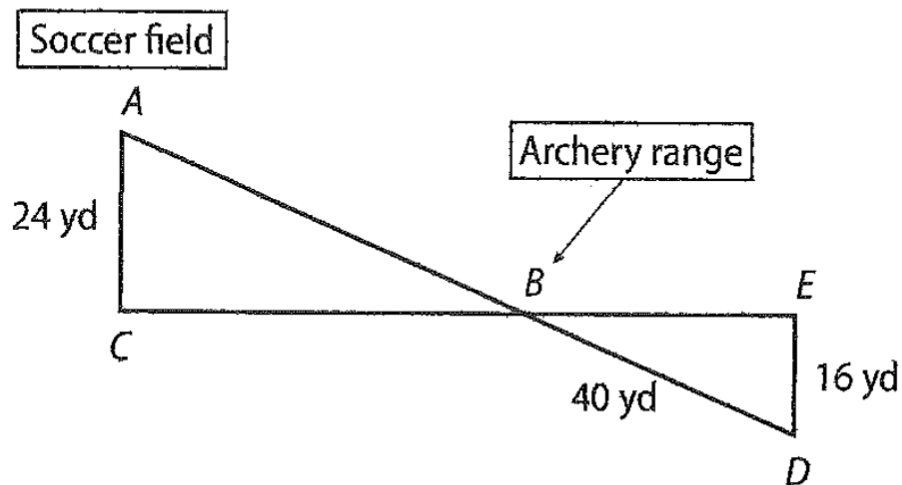
2. In the figure, $\triangle CDE \sim \triangle GDF$. Find the distance CE across Rancher Canyon.



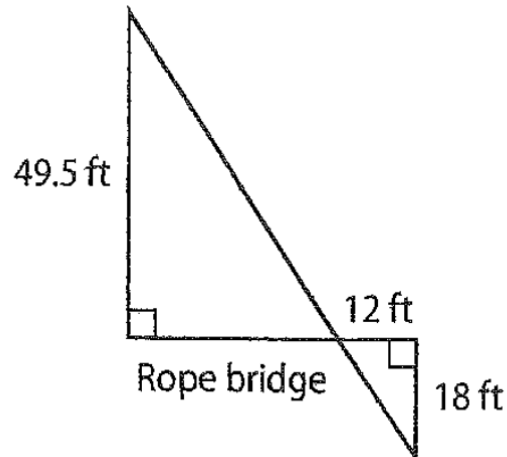
3. The triangles below are similar. How far is Dora's house from Micala's house?



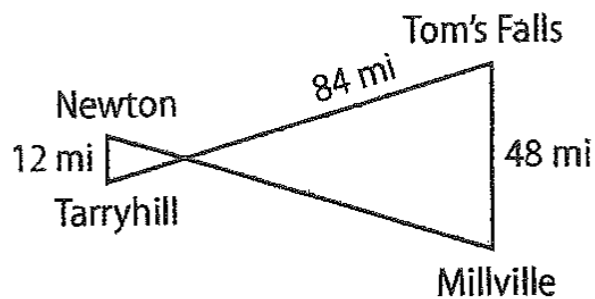
4. In the figure, $\triangle ABC \sim \triangle DBE$. How far is the archery range from the soccer field?



5. The triangles below are similar. How long is the rope bridge?



6. The triangles below are similar. What is the distance between Tarryhill and Tom's Falls?



7. A 6-ft observer casts a 4-ft shadow at the same time a chimney casts a 238-foot shadow. How tall is the chimney?
8. The May Road Apartments in Hong Kong cast a 90-meter shadow at the same time a 1.5-meter tall tenant casts a 0.75-meter shadow. How tall is the apartment building?
9. The world's tallest man lived from 1918 to 1940. He cast a 4-foot $5\frac{1}{2}$ -inch shadow when a 6-foot pole cast a 3-foot shadow. How tall was he?
10. A man casts a 14-foot shadow. A 4-foot-tall child casts a 9-foot 4-inch shadow at the same time. How tall is the man?