

## Similar Triangles – Word Problems

1. A tree  $46\frac{3}{4}$  feet tall casts a shadow 99 feet long. Brad is  $4\frac{1}{4}$  feet tall. How long is Brad's shadow?
2. Triangles CDE and HIJ are similar. The length of the sides of CDE are 228, 240, and 156. The length of the smallest side of HIJ is 312, what is the length of the longest side of HIJ?
3. Triangles EFG and STU are similar.  $FG:TU = 4:2$ , and  $ST = 88$ , what is the length of EF?
4. A tree  $42\frac{1}{2}$  feet tall casts a shadow 80 feet long. Albert is  $4\frac{1}{4}$  feet tall. How long is Albert's shadow?
5. Triangles BCD and KLM are similar. The length of the sides of BCD are 240, 188, and 204. The length of the longest side of KLM is 540, what is the perimeter of KLM?
6. Triangles JKL and PQR are similar. The length of the sides of JKL are 70, 161, and 217. The length of the longest side of PQR is 155, what is the perimeter of PQR?
7. A tree 14 feet tall casts a shadow 12 feet long. Andrew is  $3\frac{1}{2}$  feet tall. How long is Brad's shadow?
8. Triangles EFG and KLM are similar. The length of the sides of EFG are 483, 420, and 497. The length of the smallest side of KLM is 600, what is the length of the longest side of KLM?
9. Triangles GHI and TUV are similar.  $GI:TV = 8:12$ , and  $UV = 708$ , what is the length of HI?
10. A tree 54 feet tall casts a shadow 63 feet long. Bill is 6 feet tall. How long is Bill's shadow?