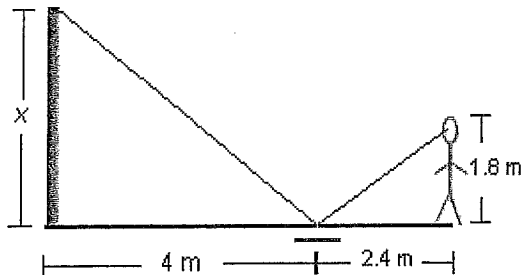SECONDARY MATH II
TRIANGLES AND TRIGONOMETRY
SIMILAR TRIANGLES AND PROPORTIONS

NAME_____
DATE_____
CLASS_____

1. A statue, honoring fallen soldiers in Veitnam, can be found on the State Capitol grounds in Salt Lake City. Given the information find the height of the statue.
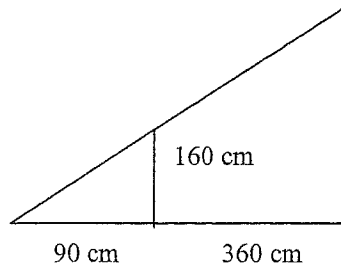

2. A tree 24 feet tall casts a shadow 12 feet long. Bryce is 6 feet tall. How long is Bryce's shadow? (draw a diagram and solve)

3. Triangles EFG and QRS are similar. The length of the sides of EFG are 144, 128, and 112. The length of the smallest side of QRS is 280, what is the length of the longest side of QRS? (draw a diagram and solve)

4. A 40-foot flagpole casts a 25-foot shadow. Find the shadow cast by a nearby building 200 feet tall. (draw a diagram and solve)

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5. Brooke is 160 cm tall, she stands 360 cm from a lamp post at night. Her shadow from the light is 90 cm long. How high is the lamp post?

160 cm

90 cm   360 cm

6. A tower casts a shadow 7 m long. A vertical stick casts a shadow 0.6 m long. If the stick is 1.2 m high, how high is the tower? (draw a diagram and solve)

7. Triangles IJK and TUV are similar. The length of the sides of IJK are 40, 50, and 24. The length of the longest side of TUV is 275, what is the perimeter of TUV? (draw a diagram and solve)

8. Triangles CDE and NOP are similar. The perimeter of smaller triangle CDE is 133. The lengths of two corresponding sides on the triangles are 53 and 212. What is the perimeter of NOP?