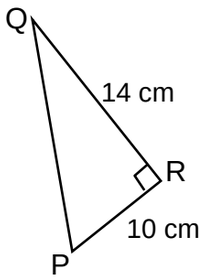
Math 1201: **ANSWERS**

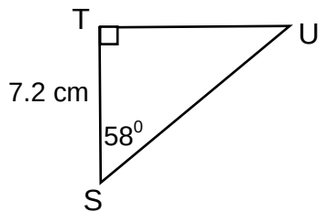
Chapter 2: Trigonometry Review Sheet

1. Find the measure of ∠P to the nearest degree.



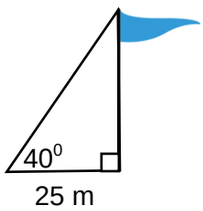
$\angle P = 54^0$

2. Find the length of TU to the nearest tenth of a centimeter.



TU = 11.5 cm

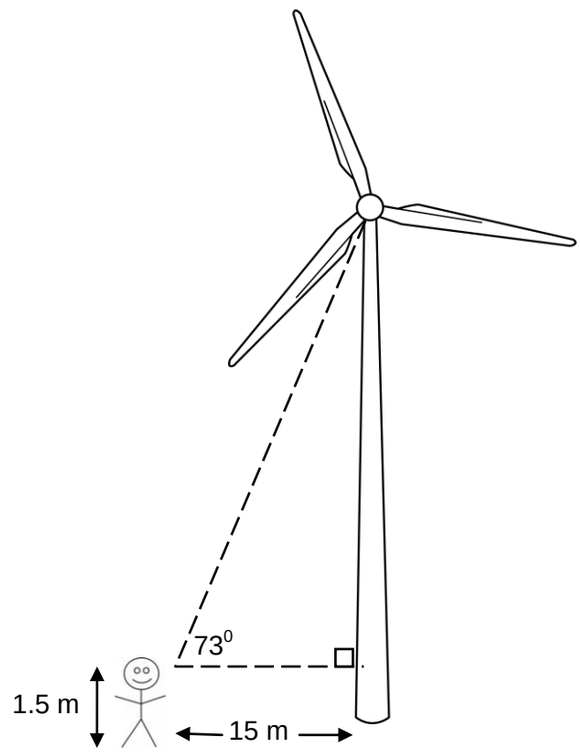
3. A flagpole casts a shadow that is 25 m long when the angle between the sun's rays and the ground is 40^0. What is the length of the flagpole to the nearest meter?



Flagpole = 21 m

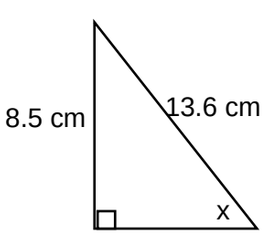
4. Use the information in the diagram to find the height of the tower of the wind turbine. Give the answer to the nearest tenth of a meter.

Tower = 50.6 m



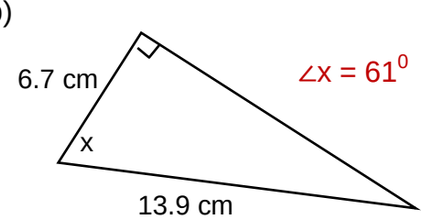
5. Find the measure of each indicated angle to the nearest degree.

a)



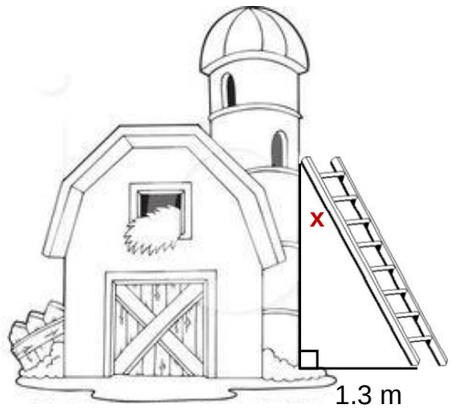
$\angle x = 39^0$

b)



$\angle x = 61^0$

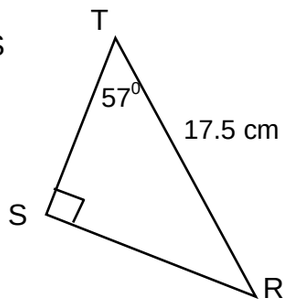
6. A 2.8m ladder is leaning against a barn. What angle does the ladder make with the barn, to the nearest degree?



$\angle x = 28^0$

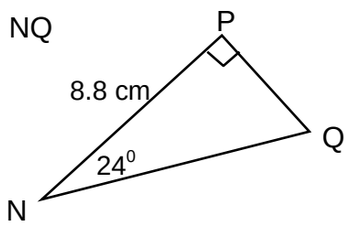
7. Find the length of each indicated side to the nearest tenth of a centimeter.

a) RS



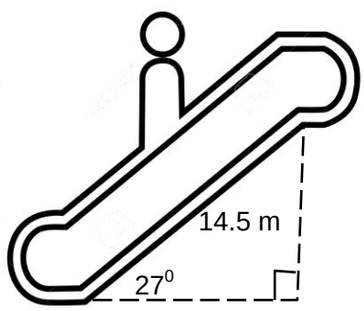
RS = 14.7 cm

b) NQ



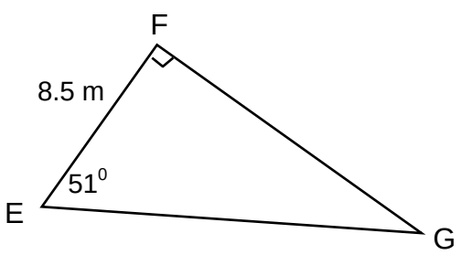
NQ = 9.6 cm

8. An escalator is 14.5m long. The escalator makes an angle of 27^0 with the ground. What is the height of the escalator to the nearest tenth of a meter?



Height = 6.6 m

9. Solve the triangle. Give side lengths to the nearest tenth and angles to the nearest degree.

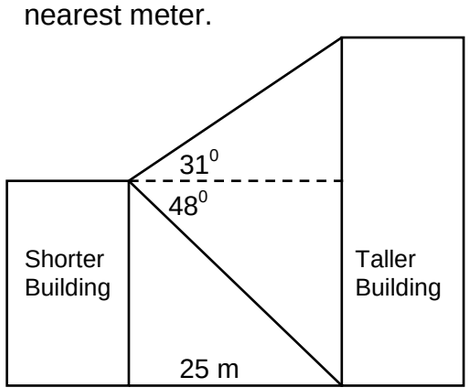


$\angle G = 39^0$

FG = 10.5 cm

EG = 13.5 cm

10. Two buildings are 25 m apart. From the top of the shorter building, the angles of elevation and depression of the top and bottom of the taller building are 31^0 and 48^0 respectively. What is the height of the taller building? Give your answer to the nearest meter.



Height of Tall building = 43 m