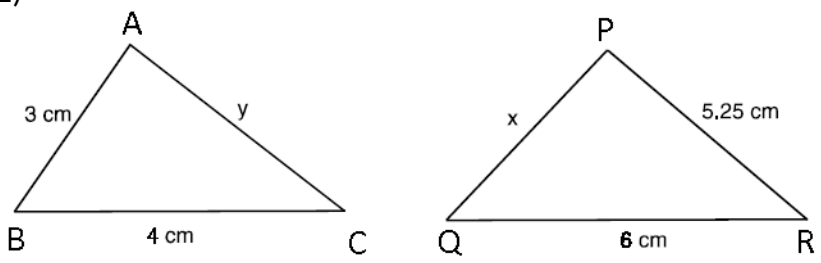
**Name:** _____

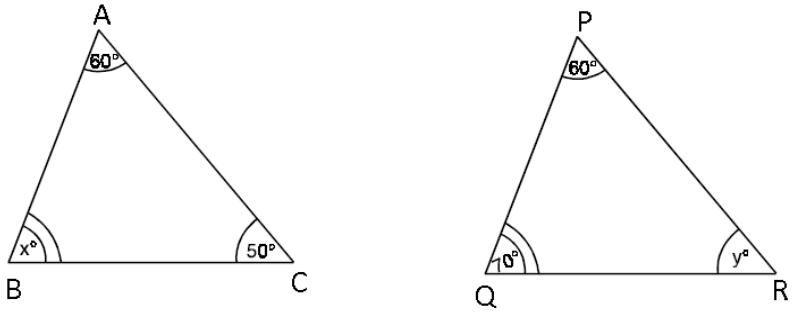
## Similar Triangles

1) Find the values of x and y if △ABC ~ △PQR

1)




2)




2) In which of the following cases, △'s ABC and PQR are similar

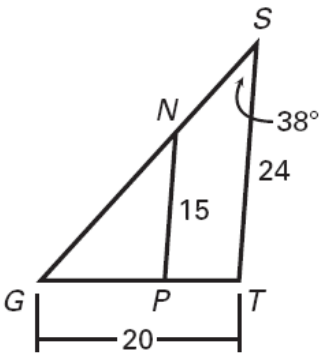
1) $\angle A = 40°$, $\angle B = 60°$, $\angle C = 80°$, $\angle P = 40°$, $\angle Q = 60°$ and $\angle R = 80°$

2) $\angle A = 50°$, $\angle B = 70°$, $\angle C = 60°$, $\angle P = 50°$, $\angle Q = 60°$ and $\angle R = 70°$

3) AB = 2.5 cm, BC = 4.5 cm, CA = 3.5 cm
PQ = 5.0 cm, QR = 9.0 cm, RP = 7.0 cm

4) AB = 3 cm, BC = 4 cm, CA = 5.0 cm
PQ = 4.5 cm, QR = 7.5 cm, RP = 6.0 cm.

3) $\triangle GST \sim \triangle GNP$

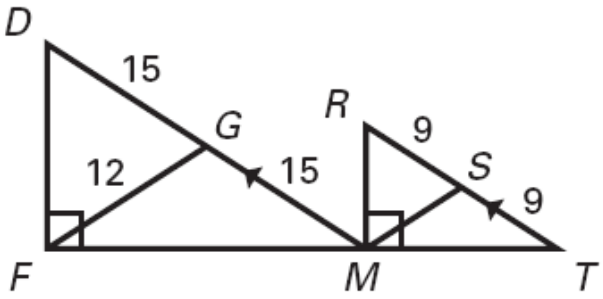



1) Write the statement of proportionality.

2) Find $m\angle GNP$.

3) Find $GP$.

4) Find the length of $\overline{MS}$ .




5) You are standing 15 m from building A and 50 m from building B. Building A is 90 m tall. Find the height of building B.