

Class 10 Mathematics - Triangles

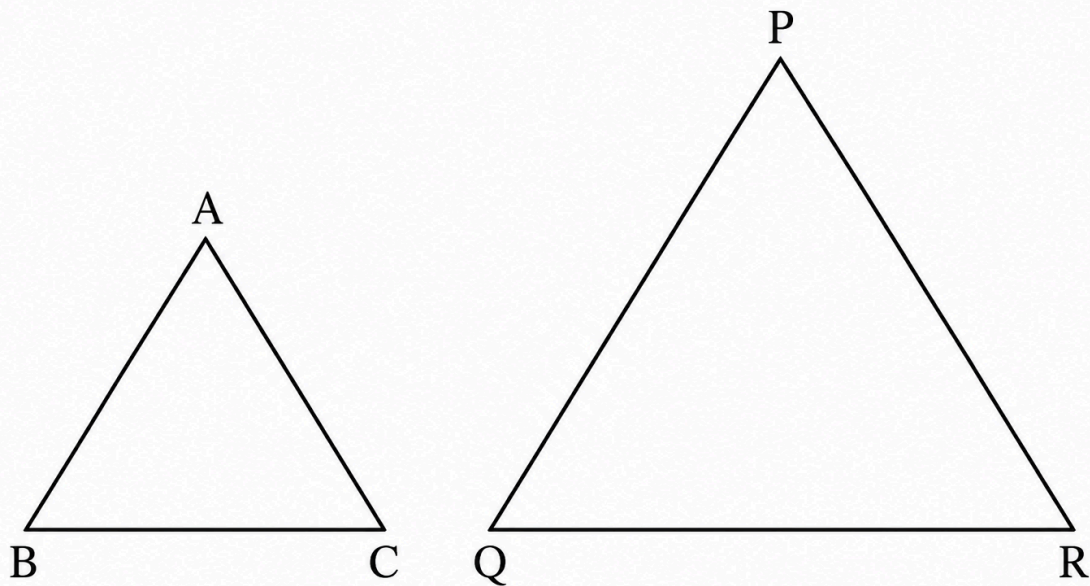
Name: _____

Date: _____

Advanced Worksheet 3

Questions

For Questions 1 - 4, refer to the figure:



$$A \leftrightarrow P$$

$$B \leftrightarrow Q$$

$$C \leftrightarrow R$$

1. If $\triangle ABC \sim \triangle PQR$ and $AB = 6$ cm, $PQ = 9$ cm, find the ratio of similarity.
2. If $BC = 12$ cm and the ratio of similarity is $2 : 3$, find QR .
3. If $AB = 8$ cm, $AC = 10$ cm and $PQ = 12$ cm, find PR .
4. If $AB = 5$ cm, $BC = 7$ cm, $AC = 9$ cm and $PQ = 10$ cm, find QR and PR .
5. In similar triangles, the ratio of their areas is equal to the square of the ratio of their corresponding _____.
6. If the ratio of corresponding sides of two similar triangles is $3 : 4$, find the ratio of their areas.

Answer Key

1. $2 : 3$
2. 18 cm
3. 15 cm
4. $QR = 14$ cm, $PR = 18$ cm
5. Sides
6. $9 : 16$