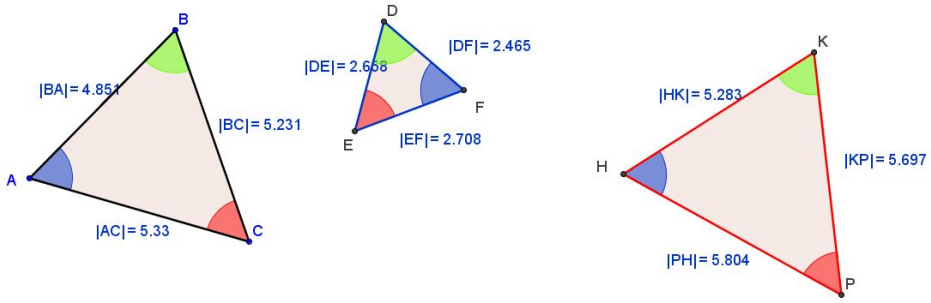
Student Activity Theorem 13

Use in connection with interactive file "Theorem 13" on the Student's CD.



Give answers correct to two decimal places

1. The triangles ABC, DEF and HKP are equiangular. What does this mean?

   _____

2. Name the sides across from (opposite) the following equal angles

   (i) Angle BAC , Opposite Side = _____ Angle EFD , Opposite Side =_____

   Angle KHP , Opposite Side = _____

   (ii) Angle ABC , Opposite Side = _____ Angle EDF , Opposite Side =_____

   Angle HKP , Opposite Side = _____

   (iii) Angle ACB , Opposite Side = _____ Angle DEF, Opposite Side =_____

   Angle HPK , Opposite Side = _____

3. Sides across from equal angles are called corresponding sides.
   Complete the following.
   [AC] corresponds to [EF] and [HP],
   [AB] corresponds to _____ and _____,
   [BC]corresponds to _____ and _____.

4. Write down the following ratios in decimal form (correct to two decimal places).
   (i) |AC| : |EF| _____ (ii) |BC| : |DE| _____ (iii) |AB| : |DF| _____

5. Write down the following ratios in decimal form (correct to two decimal places).
   (i) |AC| : |HP| _____ (ii) |BC| : |KP| _____ (iii) |AB| : |HK| _____

6. Write down the following ratios in decimal form (correct to two decimal places).
   (i) |EF| : |HP| _____ (ii) |DF| : |HK| _____ (iii) |DE| : |KP| _____

7. Move the point B and write down the ratios in questions 4, 5 and 6 again.

(i) |AC| : |EF| _____ (ii) |BC| : |DE| _____ (iii) |AB| : |DF| _____

(i) |AC| : |HP| _____ (ii) |BC| : |KP| _____ (iii) |AB| : |HK| _____

(i) |EF| : |HP| _____ (ii) |DF| : |HK| _____ (iii) |DE| : |KP| _____

8. Move the point B again to write down the same ratios again.

(i) |AC| : |EF| _____ (ii) |BC| : |DE| _____(iii) |AB| : |DF| _____

(i) |AC| : |HP| _____ (ii) |BC| : |KP| _____(iii) |AB| : |HK| _____

(i) |EF| : |HP| _____ (ii) |DF| : |HK| _____ (iii) |DE| : |KP| _____

9. What can you conclude from the calculations above.

Conclusion _____

_____

10. Click on the Tick Box on the interactive file to reveal the wording of this theorem.
Did you come to this conclusion? _____.