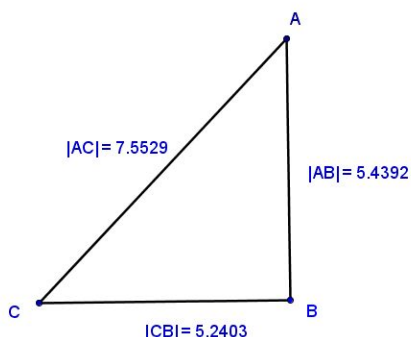


Student Activity Theorem 15

Use in connection with interactive file “Theorem 15” on the Student’s CD.



1. Write down the lengths of the following

$$|AC| = \underline{\hspace{2cm}}$$

$$|AB| = \underline{\hspace{2cm}}$$

$$|BC| = \underline{\hspace{2cm}}$$

Using your calculator find, correct to two decimal places

(i) $|AC|^2 = \underline{\hspace{2cm}}$ (ii) $|AB|^2 = \underline{\hspace{2cm}}$ (iii) $|BC|^2 = \underline{\hspace{2cm}}$

Using your calculator find if $|AC|^2 = |AB|^2 + |BC|^2$ Is this true? $\underline{\hspace{2cm}}$

Using this result can you write down the measure of the angle ABC.

$$|\angle ABC| = \underline{\hspace{2cm}}$$

2. Drag the point A to a different position.

Now write down the lengths of the following

$$|AC| \underline{\hspace{2cm}}$$

$$|AB| \underline{\hspace{2cm}}$$

$$|BC| \underline{\hspace{2cm}}$$

Using your calculator find, correct to two decimal places

(i) $|AC|^2 = \underline{\hspace{2cm}}$ (ii) $|AB|^2 = \underline{\hspace{2cm}}$ (iii) $|BC|^2 = \underline{\hspace{2cm}}$

Using your calculator find if $|AC|^2 = |AB|^2 + |BC|^2$ Is this true? $\underline{\hspace{2cm}}$

Using this result can you write down the measure of the angle ABC.

$$|\angle ABC| = \underline{\hspace{2cm}}$$

3. Drag the point A to a different position.

Now write down the lengths of the following

$$|AC| \underline{\hspace{2cm}}$$

$$|AB| \underline{\hspace{2cm}}$$

$$|BC| \underline{\hspace{2cm}}$$

Using your calculator find, correct to two decimal places

(i) $|AC|^2 =$ _____ (ii) $|AB|^2 =$ _____ (iii) $|BC|^2 =$ _____

Using your calculator find if $|AC|^2 = |AB|^2 + |BC|^2$ Is this true? _____

Using this result can you write down the measure of the angle ABC.

$|\angle ABC| =$ _____

4. From the results in questions 1, 2 and 3 what can you conclude.

Conclusion _____

5. Click on the Tick Box on the interactive file to reveal the wording of this theorem.

Did you come to this conclusion? _____