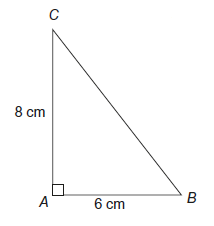
**End of Unit Test** Name: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**Pythagoras’ Theorem and Trigonometry - FOUNDATION**

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Calculator allowed

1) Calculate the length BC. You must show your working. Not drawn accurately



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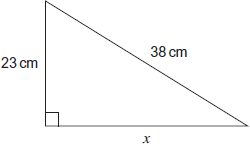
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Answer ................................................................ cm

**(Total 3 marks)**

2) Calculate the length *x* in the triangle. Not drawn accurately



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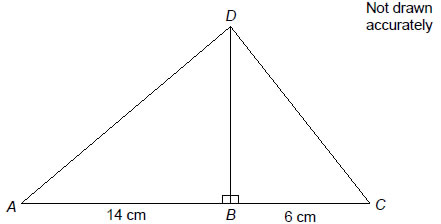
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Answer ................................................................ cm

**(Total 3 marks)**

3) In the diagram the area of triangle *ABD* is 56 cm2



Work out the length of *CD*.

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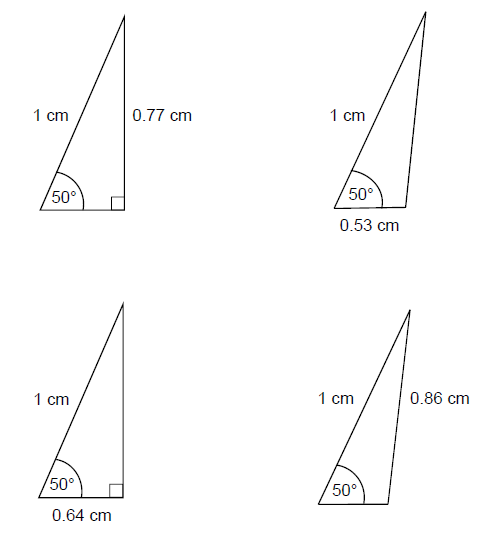
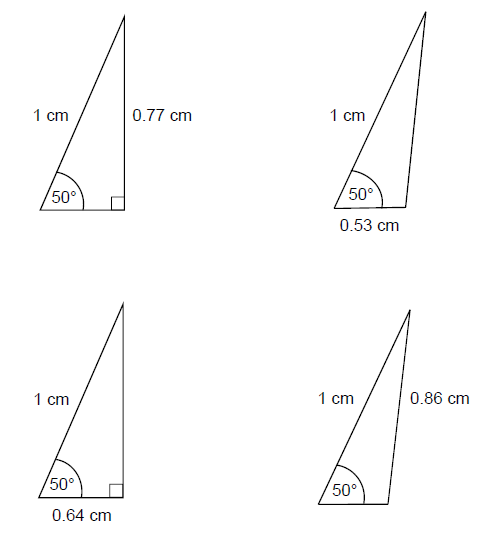
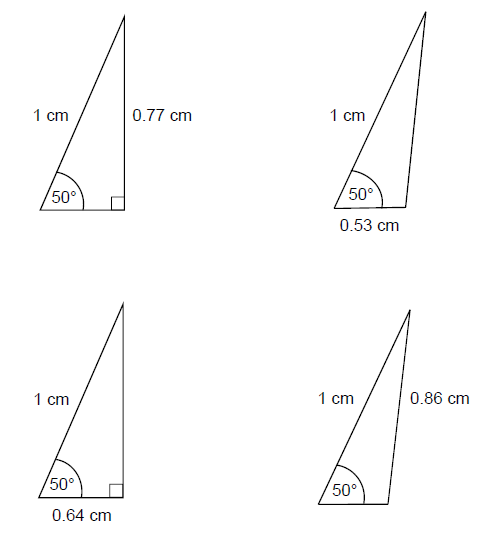
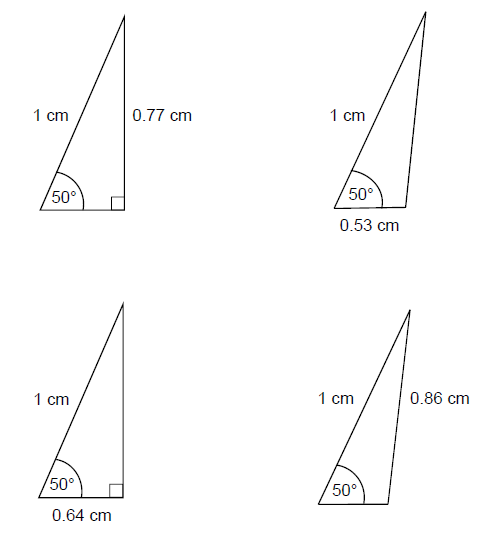
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Answer ..............................................................................cm

**(Total 4 marks)**

4) Here are sketches of four triangles. Not drawn accurately

In each triangle.

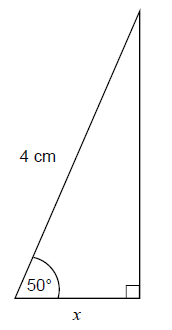
* the longest side is **exactly** 1 cm
* the other length is given to 2 decimal places.

(a) Circle the value of cos 50° to 2 decimal places.

0.77 0.53 0.64 0.86

**(1)**

(b) Work out the value of *x*. Give your answer to 1 decimal place. Not drawn accurately



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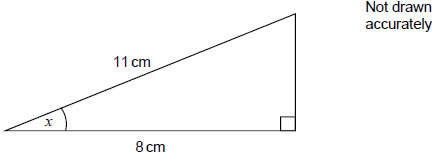
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Answer ............................................cm

**(2)**

**(Total 3 marks)**

5) (a) Work out the size of angle *x*.



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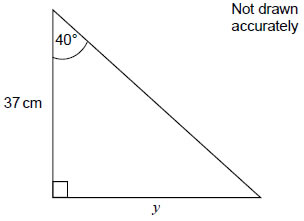
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Answer ......................................................................degrees

**(2)**

(b) Work out length *y*.



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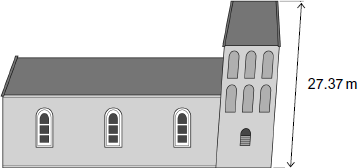
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Answer ..............................................................................cm

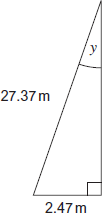
**(2)**

**(Total 4 marks)**

6) A church tower leans at an angle. Not drawn accurately



The diagram below shows the angle, *y*, at which the tower leans. Not drawn accurately



Work out angle *y*.

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Answer ............................................................ degrees

**(Total 3 marks)**

**(Total for test = 20 marks)**