Name:

Level 2 Further Maths

Exact Trig Values

Corbettmaths

Ensure you have: Pencil or pen

Guidance

1. Read each question carefully before you begin answering it.
2. Check your answers seem right.
3. Always show your workings

Revision for this topic

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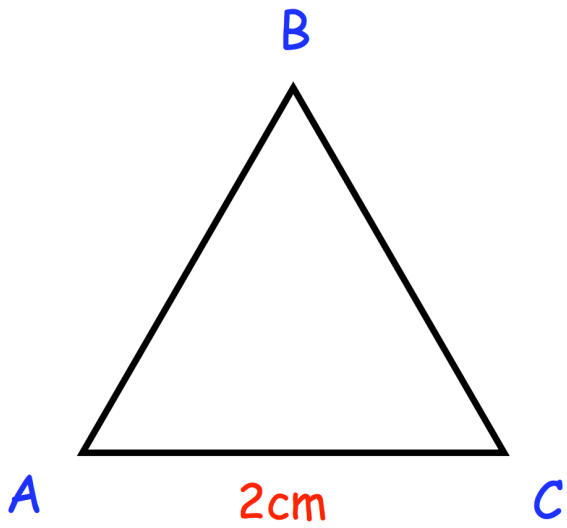
1. Shown below is an equilateral triangle, ABC, with side length 2cm.



(a) By using the triangle, show $sin30° = \frac{1}{2}$

(2)

(b) By using the triangle, show $sin60° = \frac{\sqrt{3}}{2}$

(2)

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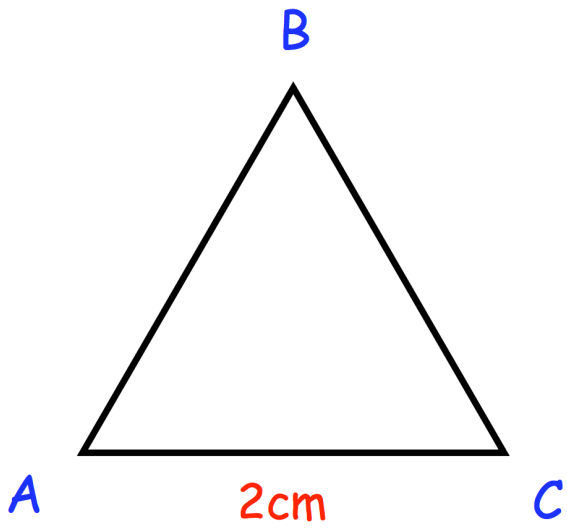
2. Shown below is an equilateral triangle, ABC, with side length 2cm.



(a) By using the triangle, show $cos30° = \frac{\sqrt{3}}{2}$

(2)

(b) By using the triangle, show $cos60° = \frac{1}{2}$

(2)

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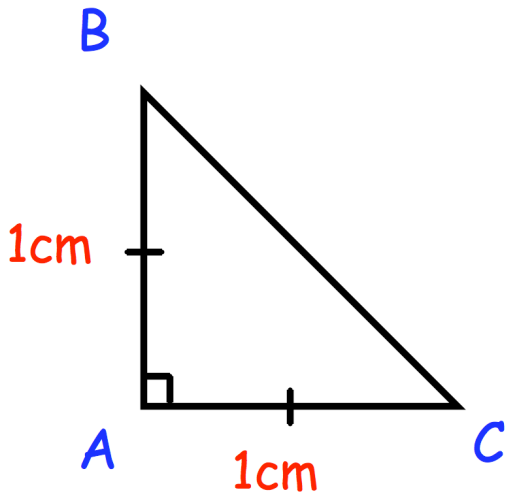
3. Shown below is an isosceles, right angled triangle, ABC.

AB = AC = 1cm



(a) By using the triangle, show $sin45° = \frac{\sqrt{2}}{2}$

(2)

(b) By using the triangle, show $cos45° = \frac{\sqrt{2}}{2}$

(2)

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4. Write down the exact value of Sin 0°

.....

(1)

5. Write down the exact value of Cos 60°

.....

(1)

6. Write down the exact value of Sin 30°

.....

(1)

7. Write down the exact value of Tan 0°

.....

(1)

8. Write down the exact value of Tan 45°

.....

(1)

9. Write down the exact value of Cos 90°

.....

(1)

10. Write down the exact value of Sin 90°

.....

(1)

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11. Write down the exact value of Sin 180°

.....

(1)

12. Write down the exact value of Cos 360°

.....

(1)

13. Write down the exact value of Sin 360°

.....

(1)

14. Write down the exact value of Cos 270°

.....

(1)

15. Write down the exact value of Tan 180°

.....

(1)

16. Write down the exact value of Sin 270°

.....

(1)

17. Write down the exact value of Cos 180°

.....

(1)

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18. Write down the exact value of Sin 60°

.....

(1)

19. Write down the exact value of Cos 45°

.....

(1)

20. Write down the exact value of Sin 45°

.....

(1)

21. Write down the exact value of Tan 30°

.....

(1)

22. Write down the exact value of Tan 60°

.....

(1)

23. Write down the exact value of Cos 30°

.....

(1)

24. Write down the exact value of Sin 120°

.....

(1)

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25. Write down the exact value of Sin 150°

.....

(1)

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26. Write down the exact value of Cos 120°

.....

(1)

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27. Write down the exact value of Sin 210°

.....

(1)

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28. Write down the exact value of Tan 300°

.....

(1)

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29. Write down the exact value of Cos 540°

.....

(1)

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30. Write down the exact value of Cos 570°

.....

(1)

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31. Write down the exact value of Sin 870°

.....

(1)

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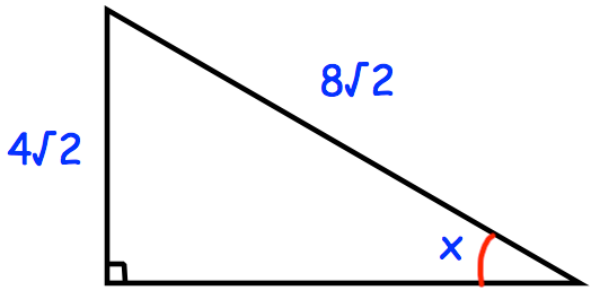
32. Below is a right angled triangle.



Show that angle x = 30°
Include all your working.

(2)

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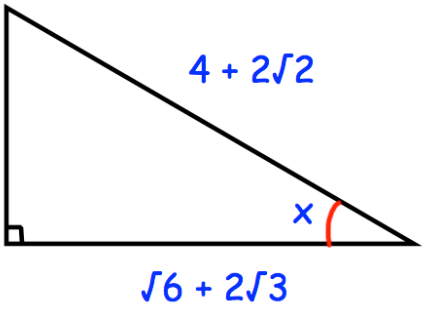
33. Below is a right angled triangle.



Show that angle x = 30°
Include all your working.

(2)

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34. Find the exact value of $\sin(225°) + \cos(150°)$

.....

(3)

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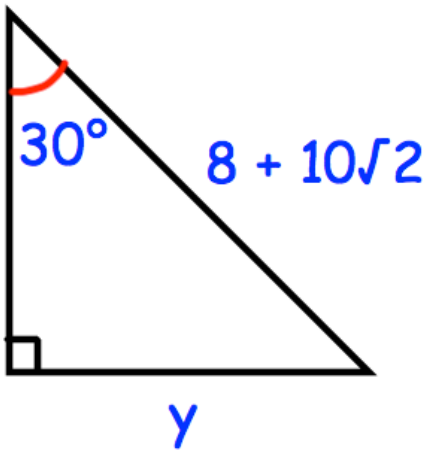
35. Shown below is a right angled triangle.



Find the exact length of the side labelled y.

.....

(4)

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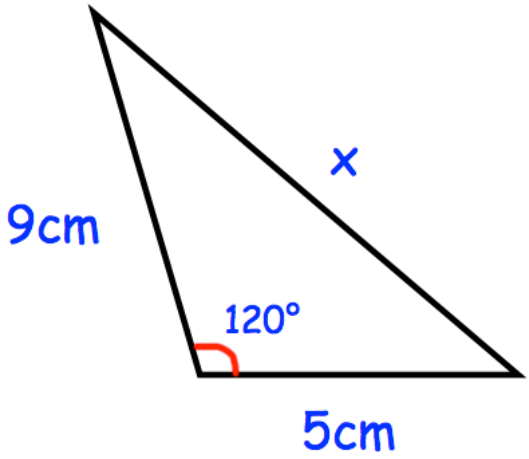
36. Shown below is a triangle.



Find the exact length of the side labelled x.

.....cm

(4)

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