

Name:

Exam Style Questions

Trigonometry: Exact Values



Equipment needed: Pen

Guidance

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

Video Tutorial

www.corbettmaths.com/contents

Video 341



Answers and Video Solutions



1. Write down the exact value of $\sin 0^\circ$



.....
(1)

2. Write down the exact value of $\cos 60^\circ$



.....
(1)

3. Write down the exact value of $\sin 30^\circ$



.....
(1)

4. Write down the exact value of $\tan 0^\circ$



.....
(1)

5. Write down the exact value of $\tan 45^\circ$



.....
(1)

6. Write down the exact value of $\cos 90^\circ$



.....
(1)

7. Write down the exact value of $\sin 90^\circ$



.....
(1)

8. Write down the exact value of $\sin 60^\circ$



.....
(1)

9. Write down the exact value of $\cos 45^\circ$



.....
(1)

10. Write down the exact value of $\sin 45^\circ$



.....
(1)

11. Write down the exact value of $\tan 30^\circ$



.....
(1)

12. Write down the exact value of $\tan 60^\circ$



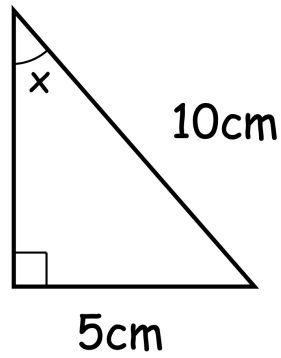
.....
(1)

13. Write down the exact value of $\cos 30^\circ$



.....
(1)

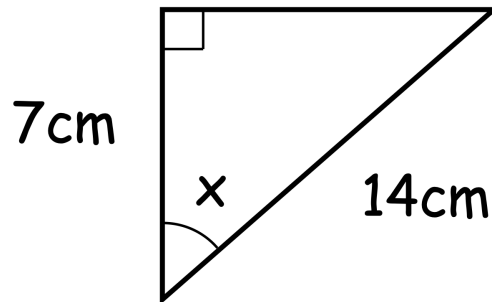
14. Shown below is a right angled triangle.



Use trigonometry to work out the size of angle x .

.....°
(2)

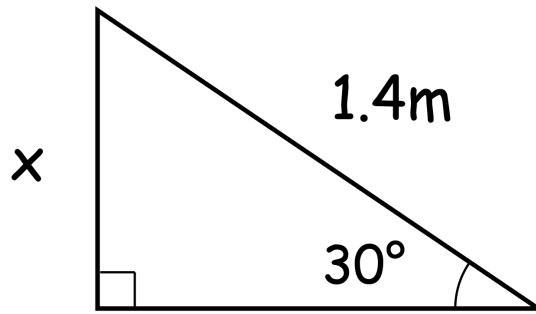
15. Shown below is a right angled triangle.



Work out the size of angle x .

.....°
(2)

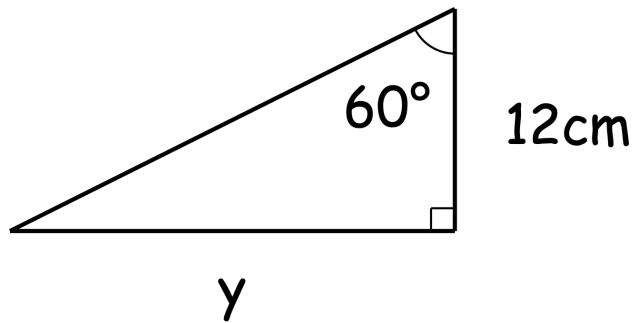
16. Shown below is a right angled triangle.



Use trigonometry to work out the value of x.

.....m
(3)

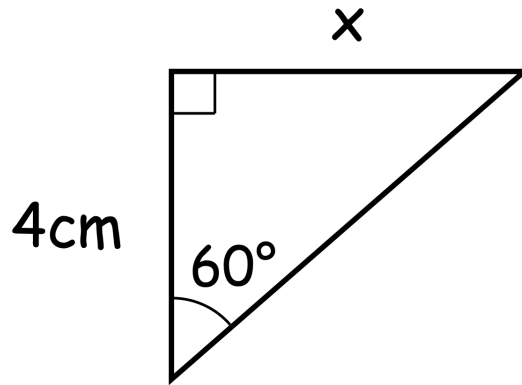
17. Shown below is a right angled triangle.



Use trigonometry to work out the exact value of y

.....cm
(3)

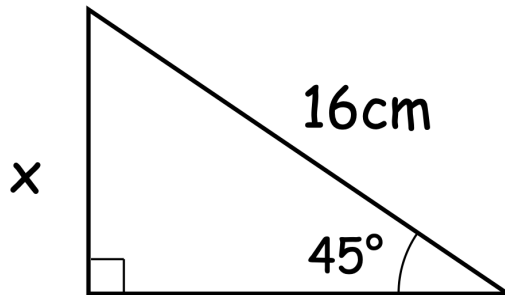
18. Shown below is a right angled triangle.



Use trigonometry to work out the exact value of x

.....cm
(3)

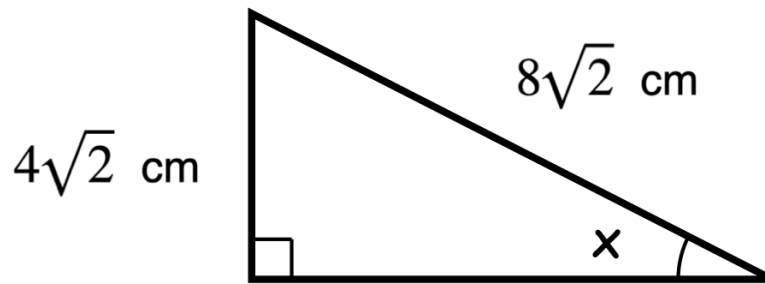
19. Shown below is a right angled triangle.



Use trigonometry to work out the exact value of x

.....cm
(3)

20. Below is a right angled triangle.



Show that angle $x = 30^\circ$
Include all your working.

(3)

21. Find the exact value of $\sin 60^\circ \times \cos 30^\circ$



Give your answer in its simplest form.

.....
(2)

22. Find the exact value of $\tan 30^\circ \div \tan 60^\circ$



Give your answer in its simplest form.

.....
(2)

23. Find the exact value of $12 \tan 60^\circ \times \sin 60^\circ \times 4 \cos 60^\circ$



.....
(3)

24. Find the exact value of $\sin 45^\circ + \cos 30^\circ$



.....
(3)

25. Find the exact value of $15 \tan 30^\circ - 4 \sin 60^\circ$



.....
(3)

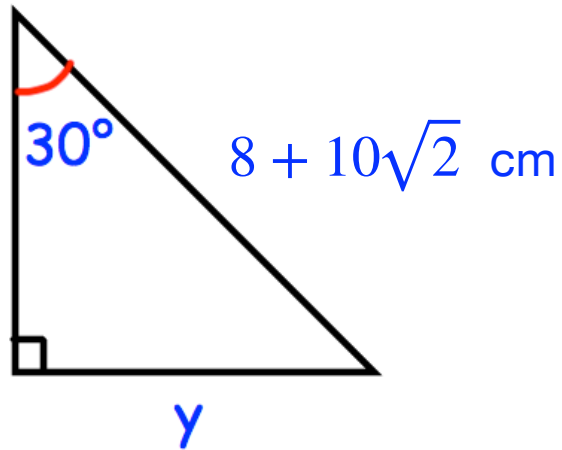
26. Show $\frac{\cos 60^\circ - \sin 45^\circ}{\tan 60^\circ}$ can be written as $\frac{\sqrt{a} - \sqrt{b}}{c}$



where a, b and c are integers.

(4)

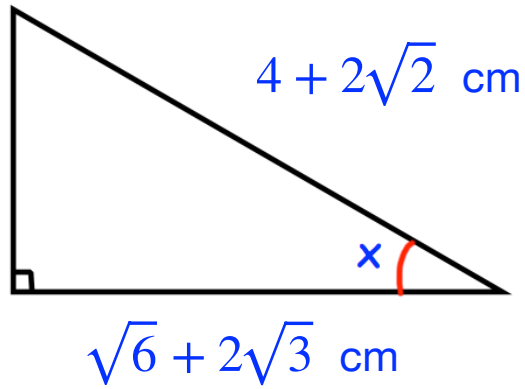
27. Shown below is a right angled triangle.



Find the exact length of the side labelled y .

.....cm
(4)

28. Below is a right angled triangle.



Show that angle $x = 30^\circ$
Include all your working.

(4)