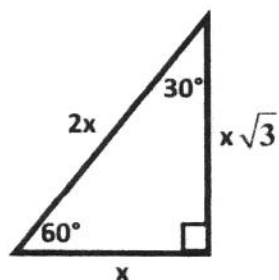
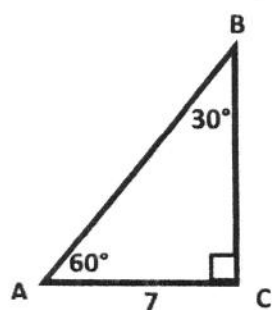


"30-60-90" Notes



1. set formula – number
2. solve for "x"
3. find the missing sides

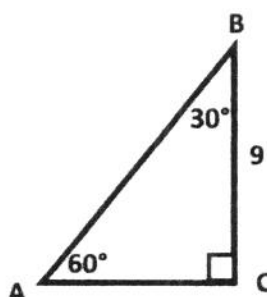
Example 1



BC = _____

AB = _____

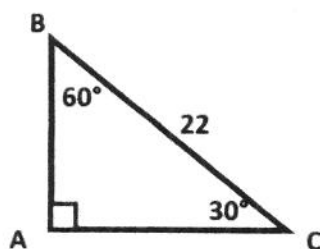
Example 4



AC = _____

AB = _____

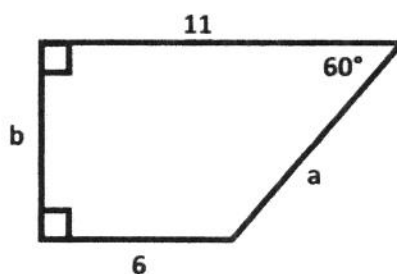
Example 2



AB = _____

AC = _____

Example 5



a = _____

b = _____

Example 3



AC = _____

BC = _____

Example 6



a = _____

b = _____

Use the given figure to find the indicated lengths.

1. $BC = 4$, $AB = \underline{\hspace{2cm}}$.

2. $BC = 7$, $AC = \underline{\hspace{2cm}}$.

3. $AB = 6\sqrt{3}$, $BC = \underline{\hspace{2cm}}$.

4. $AB = 5\sqrt{3}$, $AC = \underline{\hspace{2cm}}$.

5. $AC = 16$, $BC = \underline{\hspace{2cm}}$.

6. $AC = 18$, $AB = \underline{\hspace{2cm}}$.

7. $BC = 3$, $AB = \underline{\hspace{2cm}}$, $AC = \underline{\hspace{2cm}}$.

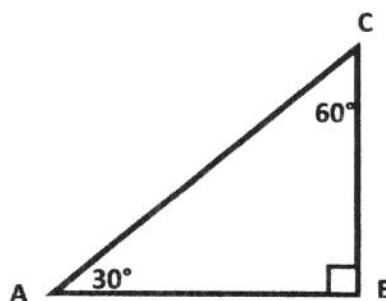
9. $AB = 11\sqrt{3}$, $BC = \underline{\hspace{2cm}}$, $AC = \underline{\hspace{2cm}}$.

11. $AC = 24$, $BC = \underline{\hspace{2cm}}$, $AB = \underline{\hspace{2cm}}$.

13. $AB = 18$, $BC = \underline{\hspace{2cm}}$, $AC = \underline{\hspace{2cm}}$.

15. $BC = 1$, $AC = \underline{\hspace{2cm}}$, $AB = \underline{\hspace{2cm}}$.

17. $BC = 15$, $AB = \underline{\hspace{2cm}}$, $AC = \underline{\hspace{2cm}}$.



8. $BC = 2$, $AC = \underline{\hspace{2cm}}$, $AB = \underline{\hspace{2cm}}$.

10. $AB = 19\sqrt{3}$, $AC = \underline{\hspace{2cm}}$, $BC = \underline{\hspace{2cm}}$.

12. $AB = 6$, $BC = \underline{\hspace{2cm}}$, $AC = \underline{\hspace{2cm}}$.

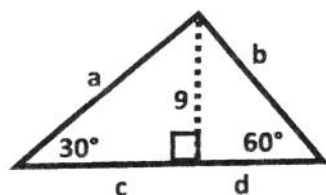
14. $AB = 36$, $BC = \underline{\hspace{2cm}}$, $AC = \underline{\hspace{2cm}}$.

16. $AC = 28$, $BC = \underline{\hspace{2cm}}$, $AB = \underline{\hspace{2cm}}$.

18. $AB = 8$, $BC = \underline{\hspace{2cm}}$, $AC = \underline{\hspace{2cm}}$.

Find the value of each variable. Leave your answer in simplest radical form.

19.



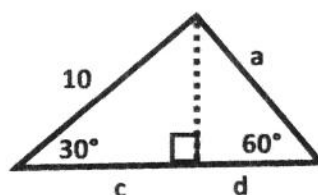
$a = \underline{\hspace{2cm}}$

$b = \underline{\hspace{2cm}}$

$c = \underline{\hspace{2cm}}$

$d = \underline{\hspace{2cm}}$

20.



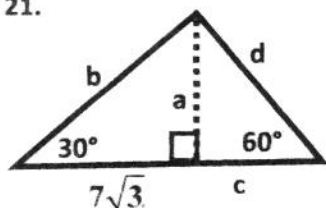
$a = \underline{\hspace{2cm}}$

$b = \underline{\hspace{2cm}}$

$c = \underline{\hspace{2cm}}$

$d = \underline{\hspace{2cm}}$

21.



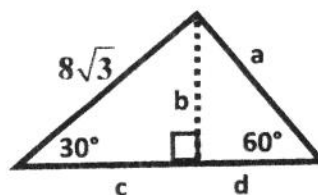
$a = \underline{\hspace{2cm}}$

$b = \underline{\hspace{2cm}}$

$c = \underline{\hspace{2cm}}$

$d = \underline{\hspace{2cm}}$

22.



$a = \underline{\hspace{2cm}}$

$b = \underline{\hspace{2cm}}$

$c = \underline{\hspace{2cm}}$

$d = \underline{\hspace{2cm}}$