

Tell whether a triangle formed with sides having the lengths named is acute, right, or obtuse. If a triangle can't be formed, write *not possible*.

9. 3, 4, 8

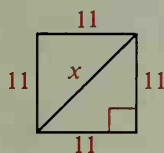
10. 11, 12, 13

11. 7, 7, 10

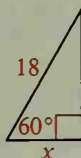
12.  $\frac{3}{5}, \frac{4}{5}, 1$

Find the value of  $x$ .

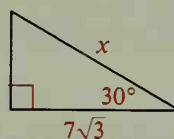
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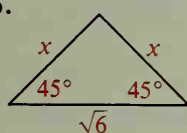
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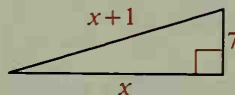
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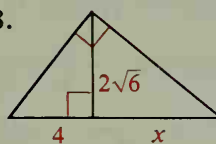
16.



17.

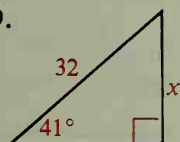


18.

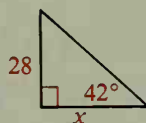


Find lengths correct to the nearest integer and angles correct to the nearest degree.

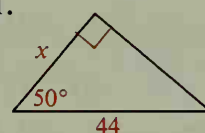
19.



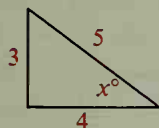
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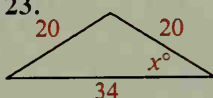
21.



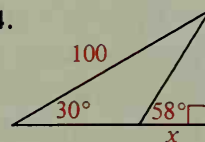
22.



23.

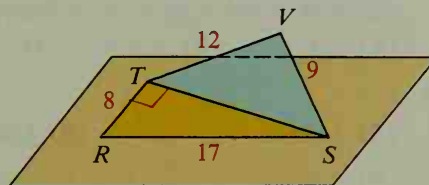


24.



25. The sides of a rhombus are 4 units long and one diagonal has length 4. How long is the other diagonal?

26. In the diagram,  $\angle RTS$  is a right angle;  $\overline{RT}$ ,  $\overline{RS}$ ,  $\overline{VT}$  and  $\overline{VS}$  have the lengths shown. What is the measure of  $\angle V$ ? Explain.



27. From the top of a lighthouse 18 m high, the angle of depression to sight a boat is  $4^\circ$ . What is the distance between the boat and the base of the lighthouse?