

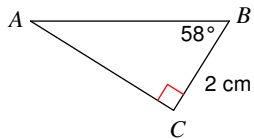
Review

Date \_\_\_\_\_ Period \_\_\_\_\_

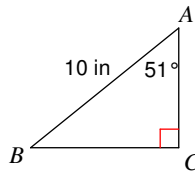
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**Solve each triangle. Round answers to the nearest tenth.**

1)

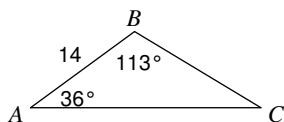


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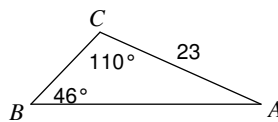


**Solve each triangle. Round your answers to the nearest tenth.**

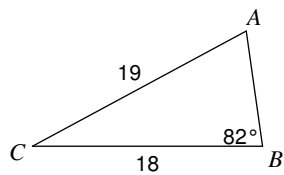
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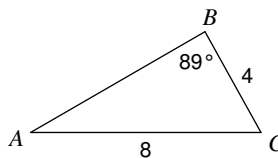
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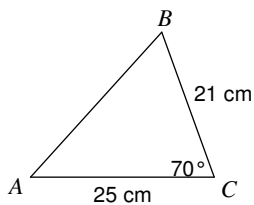
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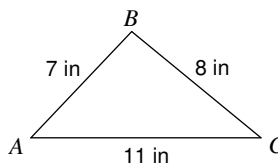
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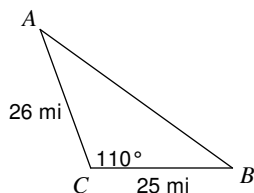
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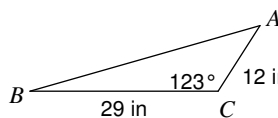
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9)

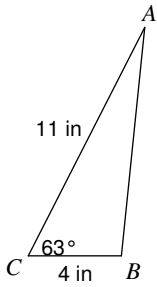


10)

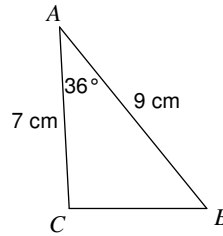


Find the area of each triangle to the nearest tenth.

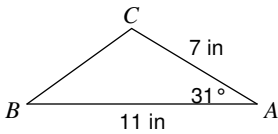
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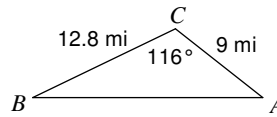
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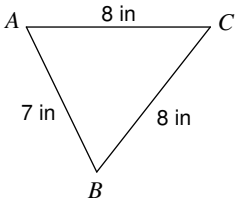
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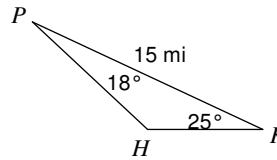
14)



15)



16)



17) From ground level the angle of elevation to the top of a building is  $65^\circ$ . If that measurement is taken 150 ft from the base of the building, what is its height?

18) Two fishing boats are spotted by the coast guard situated 42 m up a lighthouse. The angle of depression to the of the nearest boat is  $65^\circ$  and the other is  $20^\circ$ . Assuming that both boats are in line with the lighthouse, what is the distance between the fishing boats?

19) A telephone pole is supported on one side using two wires. Both wires meet at the same place, 32 m up the pole. The closer wire has an angle of elevation of  $60^\circ$  and the other  $45^\circ$ . What is the minimum length of each wire?

20) A cat has managed to get stuck up a tree. Stopping to watch the drama unfold are people in two separate cars that are 175 ft apart and are in line with the tree. The closer car makes an angle of elevation of  $45^\circ$  with the cat and the farther car  $15^\circ$ . How high up the tree is the cat stuck?

## Answers to Review (ID: 1)

- 1)  $m\angle A = 32^\circ$ ,  $b = 3.2$  cm,  $c = 3.8$  cm
- 2)  $m\angle B = 39^\circ$ ,  $b = 6.3$  in,  $a = 7.8$  in
- 3)  $m\angle C = 31^\circ$ ,  $a = 16$ ,  $b = 25$
- 4)  $m\angle A = 24^\circ$ ,  $a = 13$ ,  $c = 30$
- 5)  $m\angle C = 28.3^\circ$ ,  $m\angle A = 69.7^\circ$ ,  $c = 9.1$
- 6)  $m\angle C = 61^\circ$ ,  $m\angle A = 30^\circ$ ,  $c = 7$
- 7)  $m\angle A = 48^\circ$ ,  $m\angle B = 62^\circ$ ,  $c = 26.6$  cm
- 8)  $m\angle C = 39.4^\circ$ ,  $m\angle A = 46.5^\circ$ ,  $m\angle B = 94.1^\circ$
- 9)  $m\angle A = 34.2^\circ$ ,  $m\angle B = 35.8^\circ$ ,  $c = 41.8$  mi
- 10)  $m\angle A = 41.2^\circ$ ,  $m\angle B = 15.8^\circ$ ,  $c = 36.9$  in
- 11)  $19.6$  in<sup>2</sup>
- 12)  $18.5$  cm<sup>2</sup>
- 13)  $19.8$  in<sup>2</sup>
- 14)  $51.8$  mi<sup>2</sup>
- 15)  $25.2$  in<sup>2</sup>
- 16)  $21.6$  mi<sup>2</sup>
- 17)  $322$  ft
- 18)  $96$  m
- 19)  $37$  m and  $45$  m
- 20)  $64$  ft