

Practice - Inverse Trigonometry

Find each angle measure to the nearest degree.

1) $\sin Z = 0.4848$

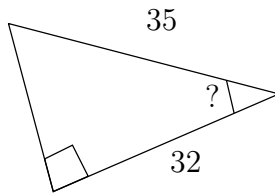
2) $\sin Y = 0.6293$

3) $\sin Y = 0.6561$

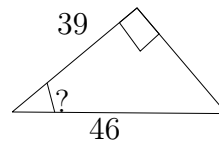
4) $\cos Y = 0.6157$

Find the measure of the indicated angle to the nearest degree.

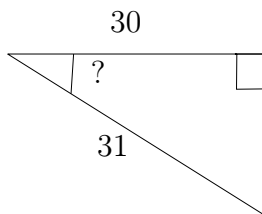
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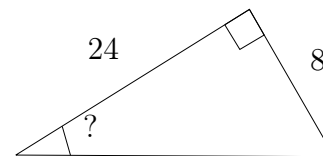
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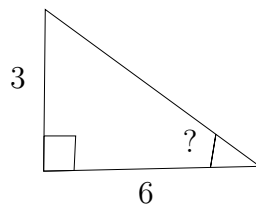
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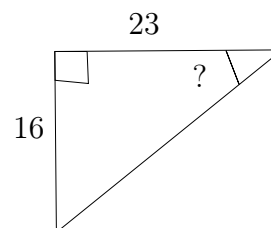
8)



9)

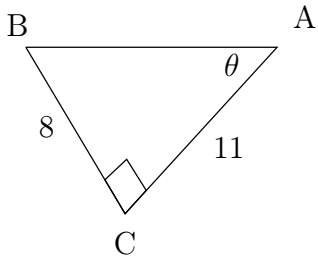


10)

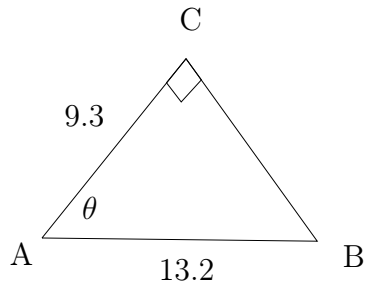


Find the measure of each angle indicated. Round to the nearest tenth.

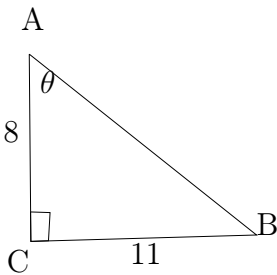
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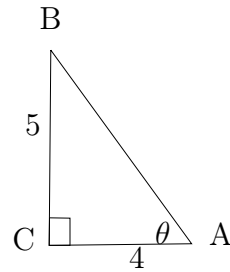
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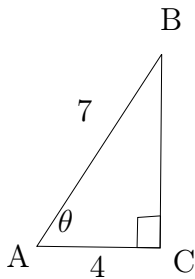
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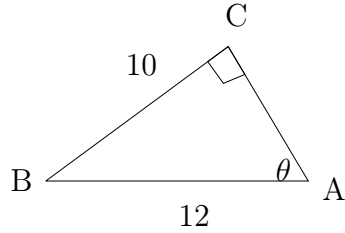
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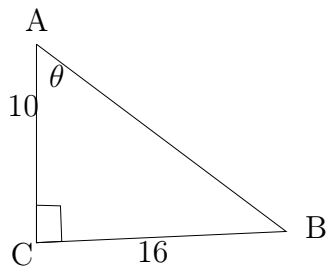
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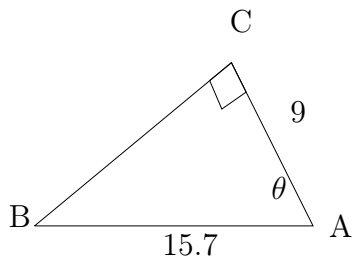
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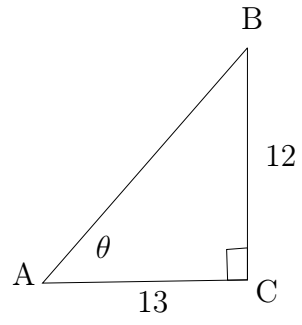
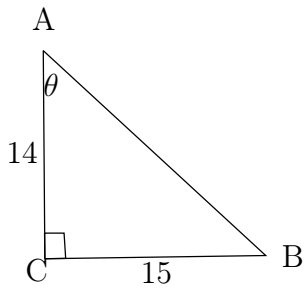
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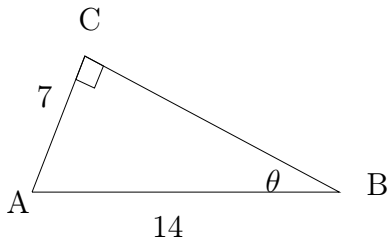
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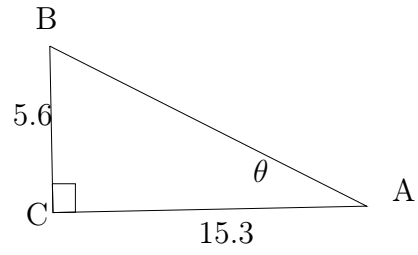
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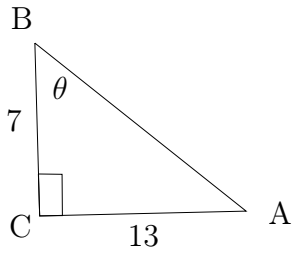
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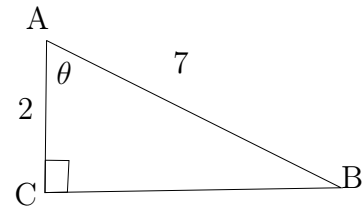
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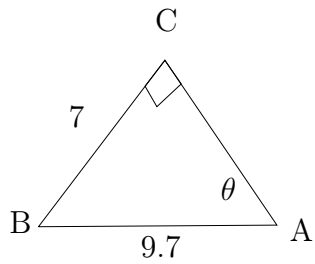
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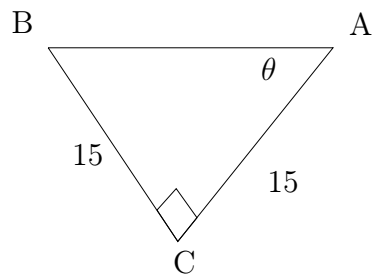
20)



14)

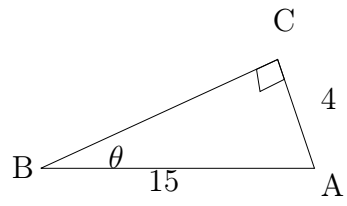
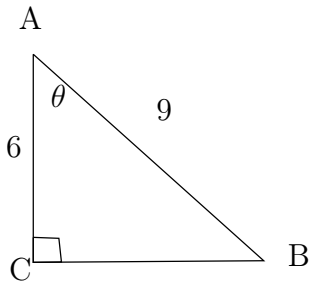


22)

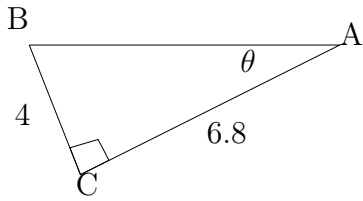


16)

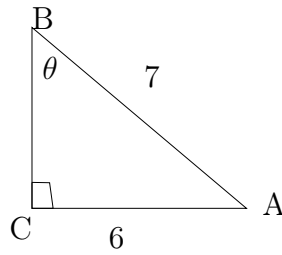
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26)



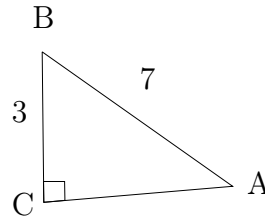
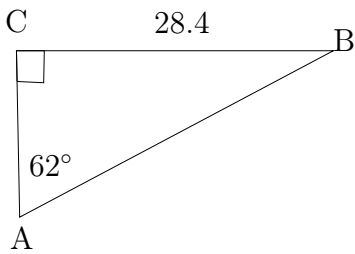
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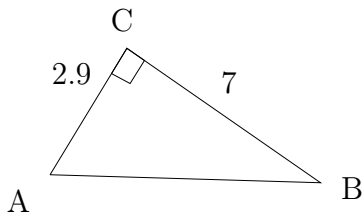
28)

Solve each triangle. Round answers to the nearest tenth.

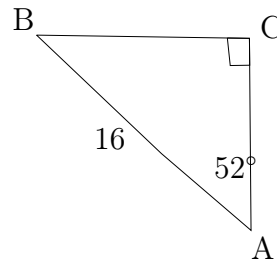
31)



33)

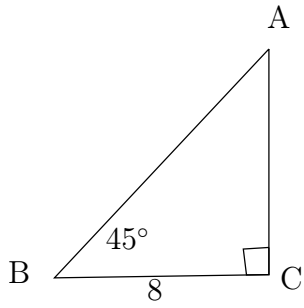


37)

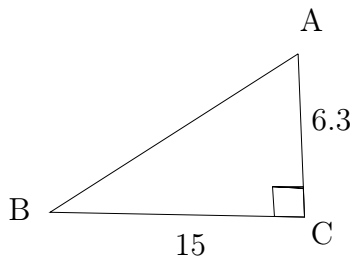


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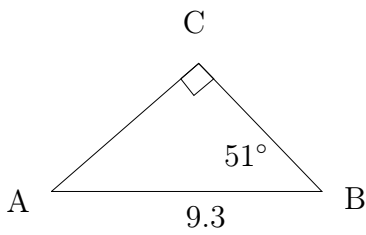
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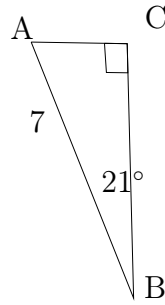
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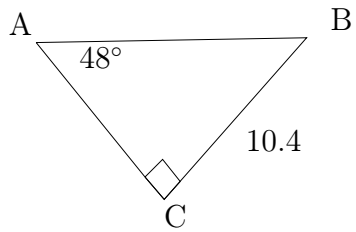
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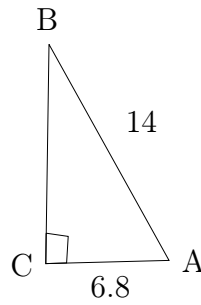
36)



38)



40)



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Answers - Inverse Trigonometry

- | | |
|------------------|---|
| 1) 29° | 22) 45° |
| 2) 39° | 23) 56.4° |
| 3) 41° | 24) 48.2° |
| 4) 52° | 25) 55° |
| 5) 24° | 26) 30.5° |
| 6) 32° | 27) 47° |
| 7) 15° | 28) 15.5° |
| 8) 18° | 29) 30° |
| 9) 27° | 30) 59° |
| 10) 35° | 31) $m\angle B = 28^\circ, b = 141, c = 32.2$ |
| 11) 36° | 32) $m\angle B = 22.8^\circ, m\angle A = 67.2^\circ,$ $c = 16.3$ |
| 12) 61.7° | 33) $m\angle B = 22.5^\circ, m\angle A = 67.5^\circ, c = 7.6$ |
| 13) 54° | 34) $m\angle A = 39^\circ, b = 7.2, a = 5.9$ |
| 14) 46.2° | 35) $m\angle B = 64.6^\circ, m\angle A = 25.4^\circ, b = 6.3$ |
| 15) 55.2° | 36) $m\angle A = 69^\circ, b = 2.5, a = 6.5$ |
| 16) 42.7° | 37) $m\angle B = 38^\circ, b = 9.9, a = 12.6$ |
| 17) 58° | 38) $m\angle B = 42^\circ, b = 9.4, c = 14$ |
| 18) 20.1° | 39) $m\angle A = 45^\circ, b = 8, c = 11.3$ |
| 19) 45.2° | 40) $m\angle B = 29.1^\circ, m\angle A = 60.9^\circ,$ $a = 12.2$ |
| 20) 73.4° | |
| 21) 51.3° | |



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