

10.8 Practice - Inverse Trigonometric Functions

Find each angle measure to the nearest degree.

1) $\sin Z = 0.4848$

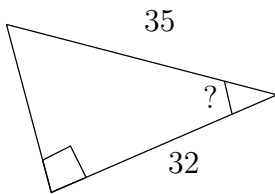
2) $\sin Y = 0.6293$

3) $\sin Y = 0.6561$

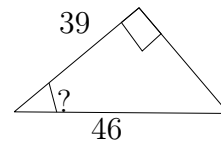
4) $\cos Y = 0.6157$

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

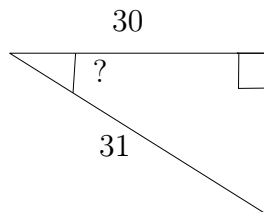
5)



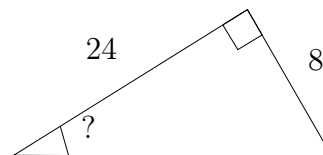
6)



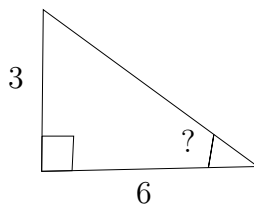
7)



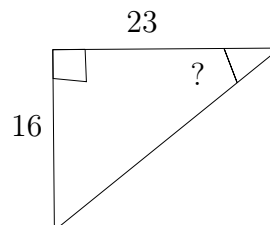
8)



9)

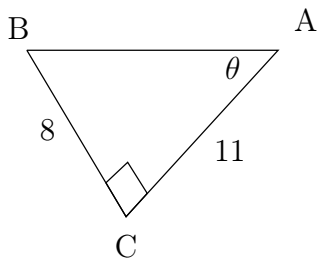


10)

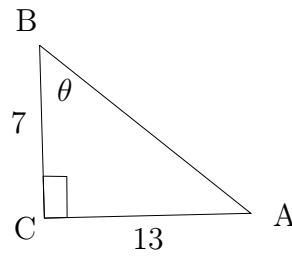


Find the measure of each angle indicated. Round to the nearest tenth.

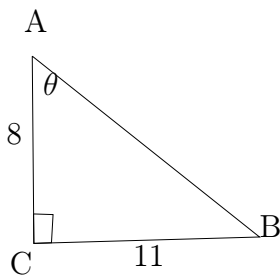
11)



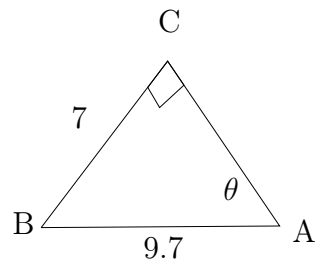
12)



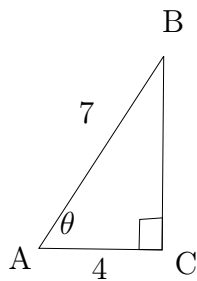
13)



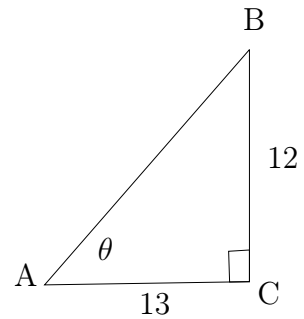
14)



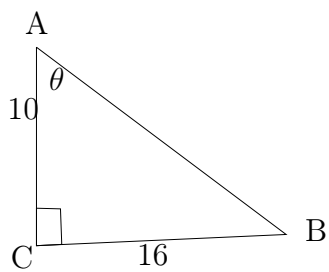
15)



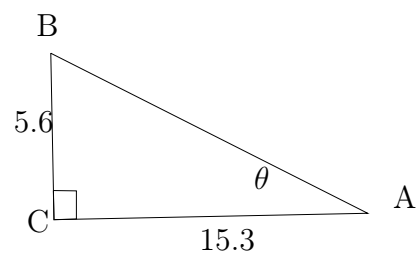
16)



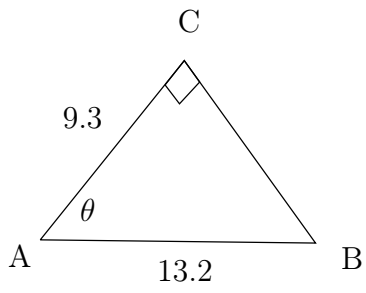
17)



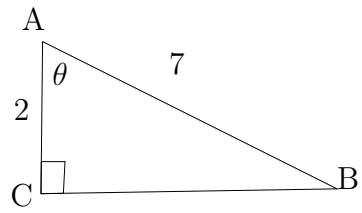
18)



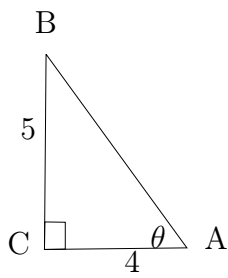
19)



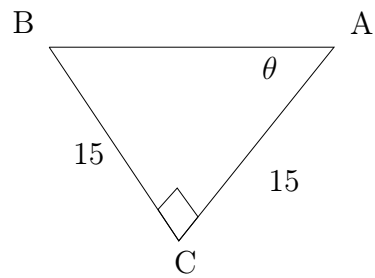
20)



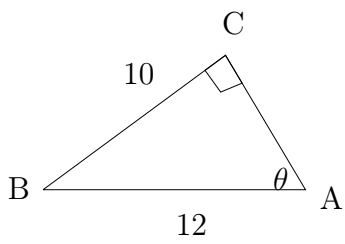
21)



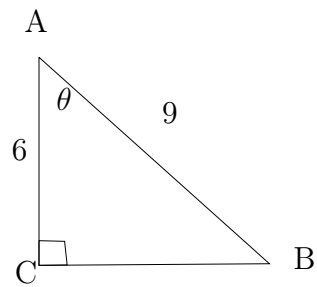
22)



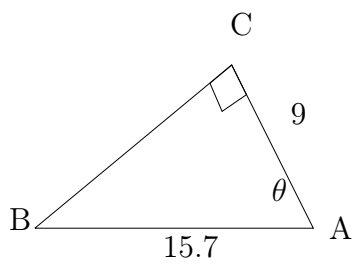
23)



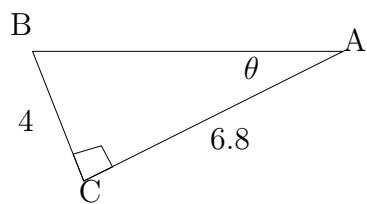
24)



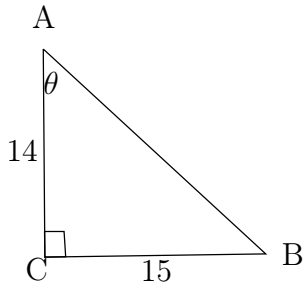
25)



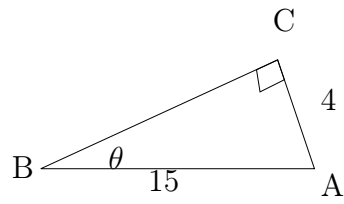
26)



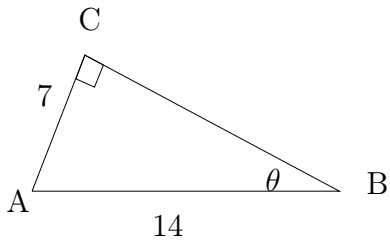
27)



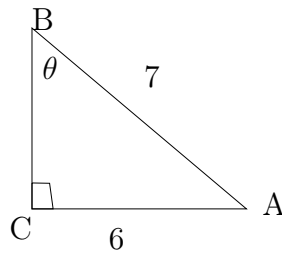
28)



29)

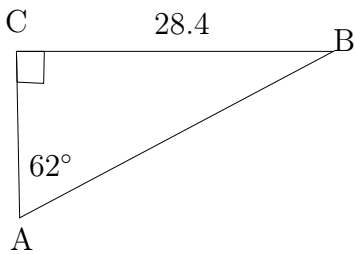


30)

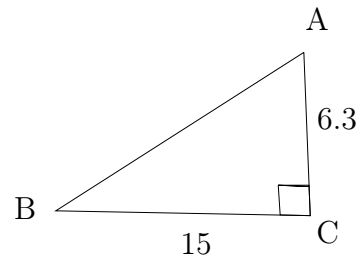


Solve each triangle. Round answers to the nearest tenth.

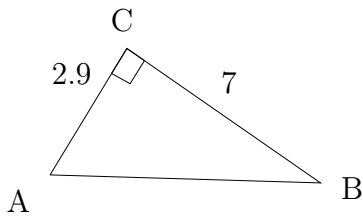
31)



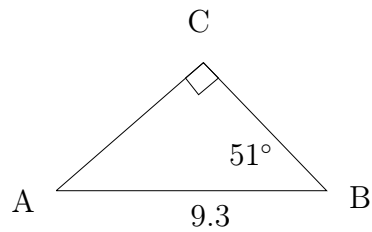
32)



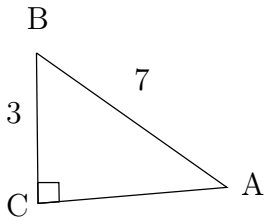
33)



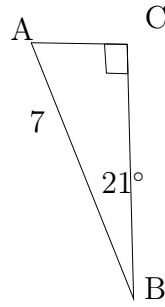
34)



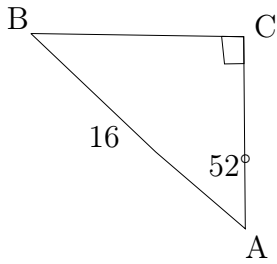
35)



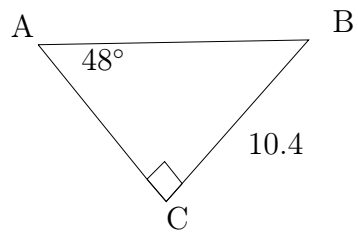
36)



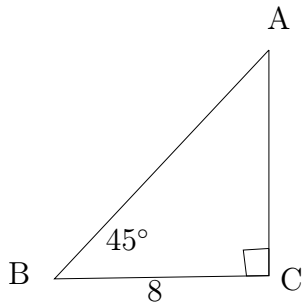
37)



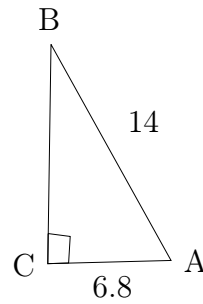
38)



39)



40)



Beginning and Intermediate Algebra by Tyler Wallace is licensed under a Creative Commons Attribution 3.0 Unported License. (<http://creativecommons.org/licenses/by/3.0/>)

Answers - Inverse Trigonometric Functions

- | | |
|------------------|---|
| 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) $m\angle B = 28^\circ, b = 15.1, c = 32.2$ |
| 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° | |



Beginning and Intermediate Algebra by Tyler Wallace is licensed under a Creative Commons Attribution 3.0 Unported License. (<http://creativecommons.org/licenses/by/3.0/>)