

Worksheet 9.4 PLUS p.352 #1, 7, 15 -Show your work on a separate piece of paper

© 2012 Kuta Software LLC. All rights reserved.

In each problem, angle C is a right angle. Solve each triangle rounding answers to the nearest tenth.

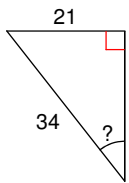
1) $m\angle A = 22^\circ$, $a = 6.1$

2) $m\angle B = 65^\circ$, $c = 3$

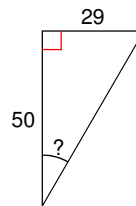
3) $b = 3$, $c = 6$

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

4)



5)

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

6) $m\angle C = 18^\circ$, $b = 35$ km, $c = 14$ km

7) $m\angle B = 47^\circ$, $a = 13$ yd, $b = 4$ yd

8) $m\angle B = 108^\circ$, $m\angle A = 38^\circ$, $c = 10$ yd

9) $m\angle A = 82^\circ$, $c = 33$ yd, $a = 44$ yd

10) $b = 20$ mi, $c = 11$ mi, $m\angle A = 80^\circ$

11) $c = 25$ m, $b = 30$ m, $a = 23$ m

12) Find the area of a regular 10-gon with radius of 7 cm.

13) Find the area of a regular hexagon with radius 5 yd.

Find the area of each triangle.

14) In $\triangle FDE$, $d = 4$ km, $e = 13$ km, $m\angle F = 73^\circ$

15) In $\triangle EFD$, $m\angle F = 15^\circ$, $m\angle E = 147^\circ$, $e = 16$ m

Answers to Worksheet 9.4 PLUS p.352 #1, 7, 15 -Show your work on a separate piece of paper

- 1) $m\angle B = 68^\circ$, $b = 15$, $c = 16.2$
- 2) $m\angle A = 25^\circ$, $b = 2.7$, $a = 1.3$
- 3) $m\angle B = 30^\circ$, $m\angle A = 60^\circ$, $a = 5.2$
- 4) 38°
- 5) 30°
- 6) $m\angle A = 111.4^\circ$, $m\angle B = 50.6^\circ$, $a = 42.2$ km
- 7) Not a triangle
- Or $m\angle A = 32.6^\circ$, $m\angle B = 129.4^\circ$, $a = 24.4$ km
- 8) $m\angle C = 34^\circ$, $a = 11$ yd, $b = 17$ yd
- 9) $m\angle B = 50^\circ$, $m\angle C = 48^\circ$, $b = 34$ yd
- 10) $m\angle B = 69.1^\circ$, $m\angle C = 30.9^\circ$, $a = 21.1$ mi
- 11) $m\angle B = 77.2^\circ$, $m\angle C = 54.4^\circ$, $m\angle A = 48.4^\circ$
- 12) 144 cm²
- 13) 65 yd²
- 14) 24.9 km²
- 15) 18.8 m²