HW 10   Due 04/23/14 or 04/30/14   (due to Test 3 on 04/23/14)

1) A **right** triangle has a leg **a = 15** meters and angle **β = 25°**. Angle β is opposite to leg **b**. Solve the triangle (in other words, find the missing sides and angles.) If missing sides and angles are not exact, round their values to three decimal places.

2) A right triangle has a hypotenuse **c = 18 feet** and a one of its legs is **a = 10 feet**. Solve the triangle. If missing sides and angles are not exact, round their values to three decimal places.
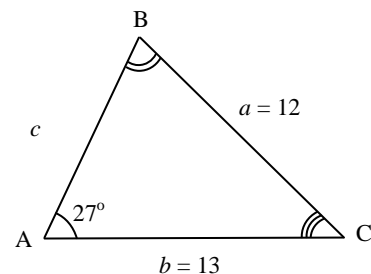
3) Solve the following triangle. Figure is not at scale.
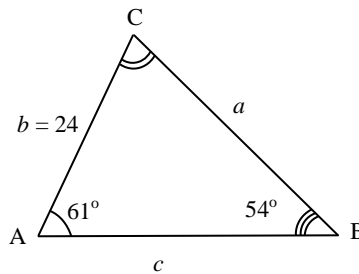
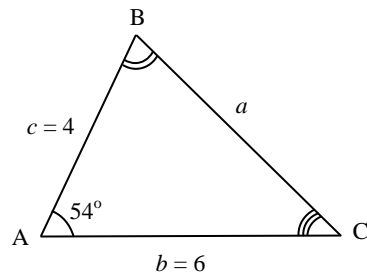4) Solve the following triangle. Figure is not at scale.
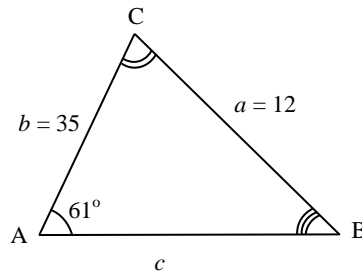
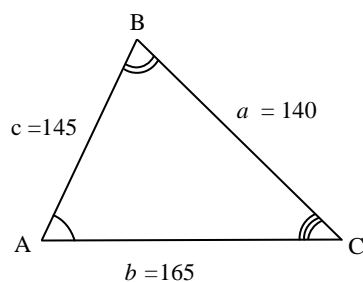5) Solve the following triangle. Figure is not at scale.
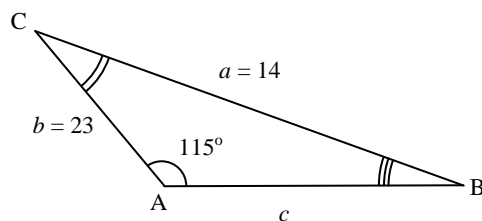
6) Solve the following triangle. Figure is not at scale.

7) Solve the following triangle. Figure is not at scale.

8) Solve the following triangle. Figure is not at scale.

9) Solve $\sin(2\theta) = 0.35\sin\theta$ for $0 \le \theta < 2\pi$.

10) Solve $\sin(2\theta) = 0.48\cos\theta$ for $0 \le \theta < 2\pi$.

11) Solve $\sin^2(2\theta) - 0.36\cos^2\theta = 0$ for $0 \le \theta < 2\pi$.

12) Solve $\sin^2(2\theta) - 0.25\sin^2\theta = 0$ for $0 \le \theta < 2\pi$.