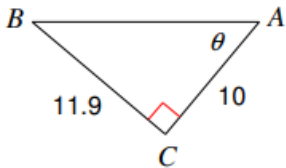


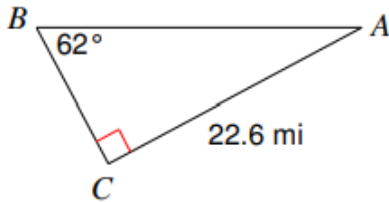
1. If $\tan \theta = \frac{3}{2}$, find the remaining 5 trigonometric ratios.

$\sin \theta =$ _____ $\sec \theta =$ _____ $\csc \theta =$ _____ $\cot \theta =$ _____ $\cos \theta =$ _____

2. Solve the triangle below. Round answers to the nearest tenth.



3. Solve the triangle below. Round answers to the nearest tenth..



4. A jet takes off and travels 56 miles to achieve an altitude of 12.6 miles. What is the angle of elevation for the jets path?

5. At 10:00 am, a person observes a hot air balloon climbing vertically in the air from a point 300 meters away from the launch pad for the balloon. The angle of elevation to the top of the balloon at this time is 25° . At 10:02am, the person observes that the angle of elevation to the balloon is now 60° . What is the change in altitude, to the nearest meter, for the balloon over the 2 minutes between the first and second observations?