1. $\csc 53^{\circ}$
2. $\sin 65^{\circ}$
3. $\tan 75^{\circ}$
4. $\sec \frac{5 \pi}{9}$
5. $\cos 67^{\circ}$
6. $\cot 171^{\circ}$
7. $\sin \frac{9 \pi}{10}$
8. $\tan 335^{\circ}$
9. $\cos 26^{\circ}$
10. $\cot \left(-55^{\circ}\right)$
II. Draw the triangle and show all work. Round your final answers to the nearest tenth.
11. From the top of a lighthouse 163 ft above sea level the angle of depression of a ship at sea is $31^{\circ} 20^{\prime}$. Find the distance of the ship from the base of the lighthouse.
12. A tree casts a shadow on the ground because of the sun's rays. The length of the shadow is 75 ft . The angle of elevation is $32^{\circ}$. Find the height of the tree.
13. The measure of angle $\mathbf{B}$ is $56^{\circ}$. The measure of angle $\mathbf{C}$ is $90^{\circ}$ and side $\mathbf{c}$ measures 20 . Solve the triangle.
III. Use the graphing calculator to convert each measure to the nearest hundredth.
14. $43^{\circ} 38^{\prime} 12^{\prime \prime}$
15. $169^{\circ} 45^{\prime} 30^{\prime \prime}$
