Find the value of the trig function indicated. Leave your answer as a ratio:

1. $\boldsymbol{\operatorname { c o s }}(\theta)=$ $\qquad$

3
2. $\boldsymbol{\operatorname { s i n }}(\theta)=$ $\qquad$

3. $\boldsymbol{\operatorname { t a n }}(\theta)=\frac{}{3}$


Find the measure of each angle indicated. Round your answer to the nearest degree.
4. $\boldsymbol{\theta}=$ $\qquad$

5. $\boldsymbol{\theta}=$ $\qquad$

6. $\boldsymbol{\theta}=$ $\qquad$


Find the measure of each side. Round your answer to the nearest tenth of a degree.
7. $\mathrm{x}=$ $\qquad$

8. $\mathrm{x}=$
9. $\mathbf{x}=$ $\qquad$

For each problem below, draw a picture. Then, use trig functions to solve. Show all work.
10. If a man is just about to ski down a steep mountain. He estimates the angle of depression from where he is now to the flag at the bottom of the course to be $24^{\circ}$. He knows that he is 800 feet higher than the base of the course. How long is the path that he will ski? (Round to the nearest foot)

11(a). A man at ground level measures the angle of elevation to the top of the building to be $67^{\circ}$. If at this point, he is 15 feet away from the building, what is the height of the building?

11(b). The same man now stands atop a building. He measures the angle of elevation to the building across the street to be $27^{\circ}$ and the angle of depression (to the base of the building across the street) to be $31^{\circ}$. If the two buildings are 50 feet apart, how tall is the taller building?

