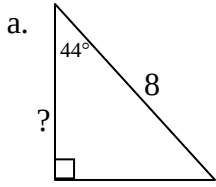
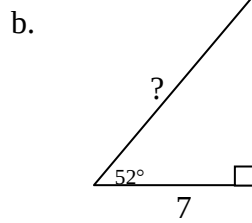


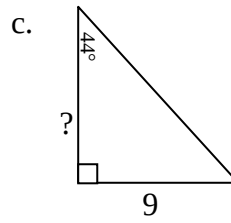
Sec 1.1 – Right Triangle Trigonometry
Right Triangle Trigonometry Sides

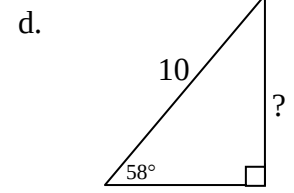
Name: _____

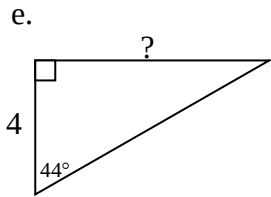
Find the requested unknown side of the following triangles.

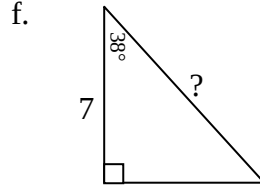


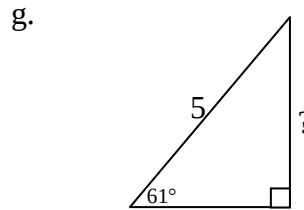


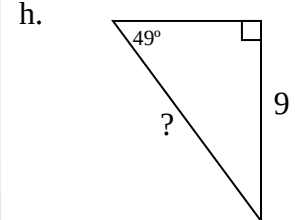




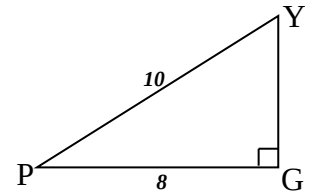




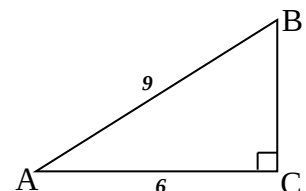




2. Find the EXACT value of $\sin(P)$.



3. Find the EXACT value of $\tan(B)$.



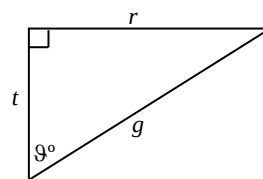
4. Which expression represents $\cos(9^\circ)$ for the triangle shown?

A. $\frac{g}{r}$

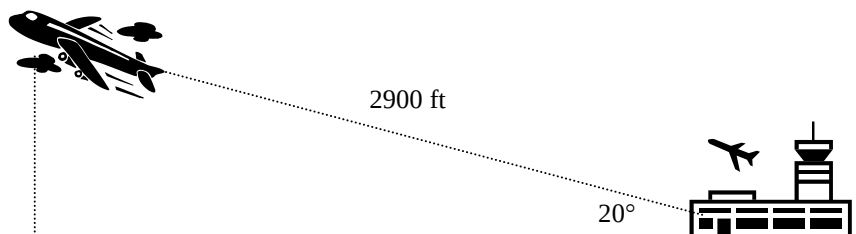
B. $\frac{r}{g}$

C. $\frac{g}{t}$

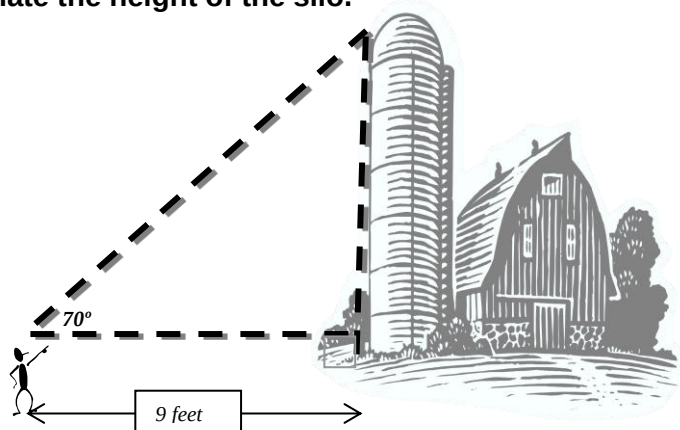
D. $\frac{t}{g}$



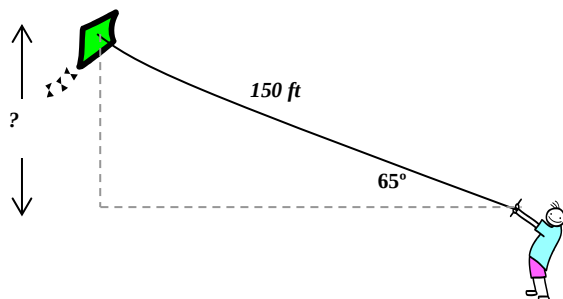
5. As a plane takes off it ascends at a 20° angle of elevation. If the plane has been traveling at an average rate of 290 ft/s and continues to ascend at the same angle, then how high is the plane after 10 seconds (the plane has traveled 2900 ft).



6. A person noted that the angle of elevation to the top of a silo was 65° at a distance of 9 feet from the silo. Using the diagram approximate the height of the silo.

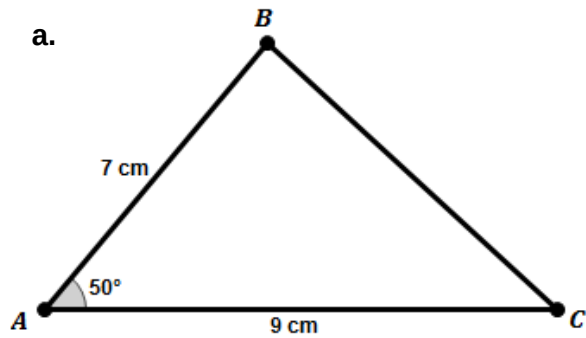


7. A kid is flying a kite and has reeled out his entire line of 150 ft of string. If the angle of elevation of the string is 65° then which expression gives the vertical height of the kite?

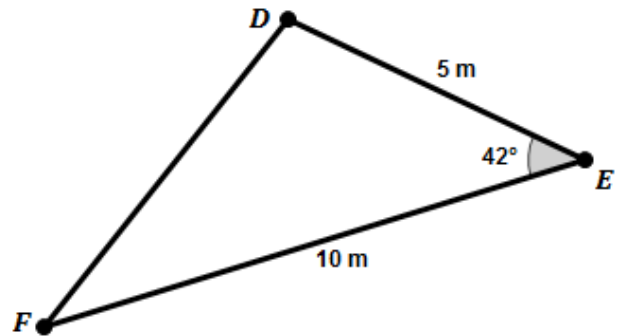


8. Find the approximate area of each of the following triangles. You may need to use trigonometry to assist in finding the area.

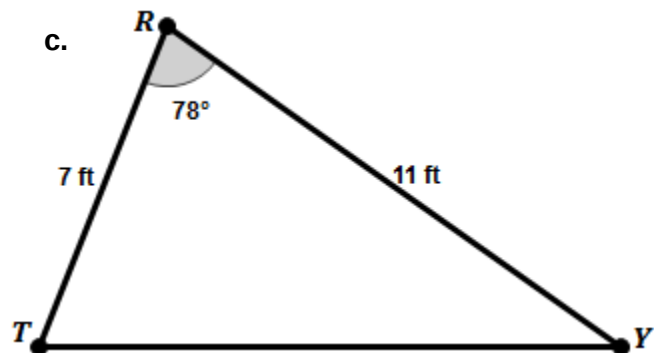
a.



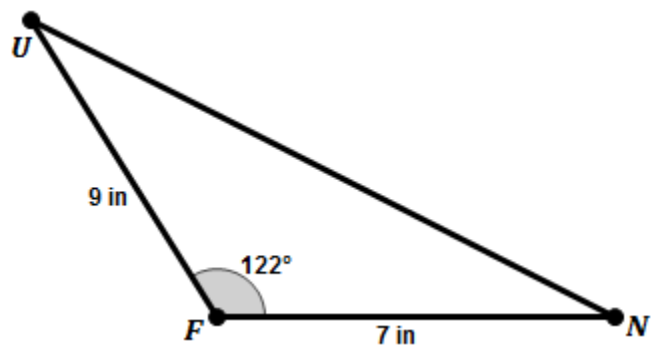
b.



c.



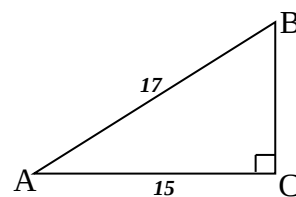
d.



9. Find the EXACT value of following based on the triangle shown:

a. $\sin(A) =$

d. $\csc(A) =$



b. $\cos(A) =$

e. $\sec(A) =$

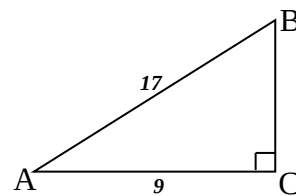
c. $\tan(A) =$

f. $\cot(A) =$

10. Find the EXACT value of following based on the triangle shown:

a. $\sin(A) =$

d. $\csc(A) =$



b. $\cos(A) =$

e. $\sec(A) =$

c. $\tan(A) =$

f. $\cot(A) =$