

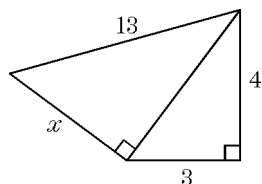
Trig Day 3 HW

Name: \_\_\_\_\_

Date: \_\_\_\_\_

1. Find the length of side  $x$ .

- A. 10      B. 12  
C. 144    D. 194



2. One end of a ramp is raised to the back of a truck 1 meter above the ground. If the length of the ramp is 2 meters, what is the measure of the angle the ramp makes with the ground?



- A.  $25^\circ$     B.  $30^\circ$     C.  $60^\circ$     D.  $90^\circ$

3. Find, to the nearest degree, the angle of elevation of the sun when a vertical pole casts a shadow half as long as the height of the pole above the ground.

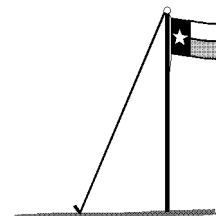
- A. 63      B. 65      C. 60      D. 58

4. The legs of an isosceles triangle have length 22 and the altitude to its base measures 18. Find to the nearest degree the measure of a base angle.

- A.  $39^\circ$     B.  $55^\circ$     C.  $35^\circ$     D.  $52^\circ$

5. The angle of elevation to the top of a flagpole is  $52^\circ$ . If the angle of elevation was measured 23 m from the center of the flagpole's base, what is its height to 1 decimal place?

- A. 14.2 m    B. 29.4 m  
C. 30.1 m    D. 37.4 m



6. A ladder is leaning against a wall. The angle of depression from the top of a 10 m ladder to where it meets the ground is  $20^\circ$ . Exactly how far away from the wall is the base of the ladder?

- A.  $10 \tan 20^\circ$       B.  $10 \sin 20^\circ$   
C.  $\frac{10}{\tan 20^\circ}$       D.  $\frac{10}{\sin 20^\circ}$

7. The angle of depression from the top of a 100 m building to a parked car is  $10^\circ$ . How far is the car from the bottom of the building?

- A.  $\frac{100}{\tan 10^\circ}$                       B.  $\frac{100}{\sin 10^\circ}$   
C.  $100 \sin 10^\circ$                 D.  $100 \sin 80^\circ$

8. From the top of a tower 200 feet high, the angle of depression of a point  $A$  on the ground, in the same horizontal plane as the base of the tower, is  $48^\circ$ . Find to the nearest foot the distance of  $A$  from the base of the tower.

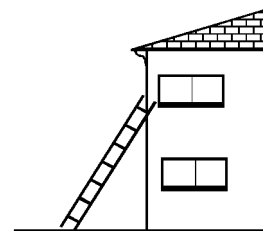
- A. 180    B. 220    C. 160    D. 140

9. A ladder is leaning against the side of a building. The ladder is 10 meters long and the angle between the ladder and the building is  $18^\circ$ . How far up the building does the ladder reach (to the nearest hundredth)?

- A. 9.51 m                      B. 10.01 m  
C. 12.28 m                    D. 14.22 m

10. A 2.7 meter ladder leans against a house forming a  $30^\circ$  angle with the house. Exactly how far is the base of the ladder from the house?

- A. 1.25 m  
B. 1.35 m  
C. 1.75 m  
D. 2.25 m



Trig Day 3 HW      03/13/2017

1.  
Answer:        B  
Objective:     G.SRT.8
  
2.  
Answer:        B  
Objective:     G.SRT.8
  
3.  
Answer:        A  
Objective:     G.SRT.8
  
4.  
Answer:        B  
Objective:     G.SRT.8
  
5.  
Answer:        B  
Objective:     G.SRT.8
  
6.  
Answer:        B  
Objective:     G.SRT.8
  
7.  
Answer:        A  
Objective:     G.SRT.8
  
8.  
Answer:        A  
Objective:     G.SRT.8
  
9.  
Answer:        A  
Objective:     G.SRT.8
  
10.  
Answer:        B  
Objective:     G.SRT.8