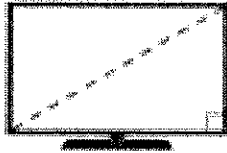


Review Assignment

1.

The size listed for a television screen represents the length of its diagonal, shown by the dashed line in the diagram below.



If Jeff wants a television screen with a width of 32 inches and a height of 24 inches, which listed size should he buy?

- A 46-in.
- B 40-in.
- C 56-in.
- D 32-in.

3.

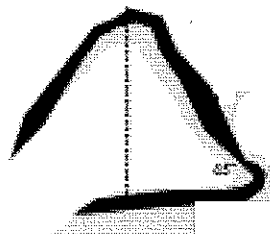
Christopher has a garden in the shape of a square with a side length of 24 feet. He plans to plant tomatoes along the diagonal. How long is the diagonal of Christopher's garden?

- A 48 ft
- B 24 ft
- C $24\sqrt{2}$ ft
- D $24\sqrt{3}$ ft

5.

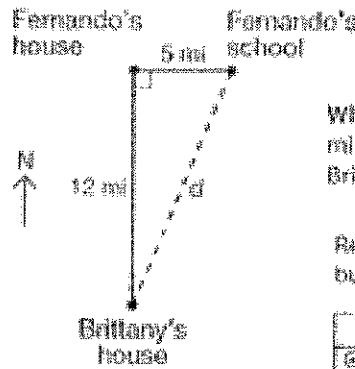
The ski slope known as Devil's Hill has an elevation from the ground of 45° . If the distance down the slope is 1500 meters, what is the altitude of the hill?

Answer: _____



2.

Fernando's house is 5 miles directly west of his school and 12 miles directly north of his friend Brittany's house, as shown in the diagram below.



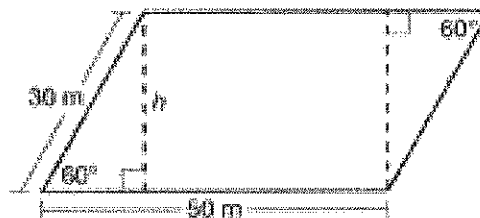
What is the direct distance, d , in miles, from Fernando's school to Brittany's house?

Record your answer and fill in the bubbles below.

<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
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4.

A farmer has a field that is in the shape of a parallelogram composed of a rectangle and two congruent $30^\circ-60^\circ-90^\circ$ triangles, as represented in the diagram below.



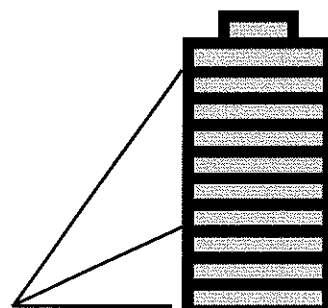
The area of a parallelogram is the product of the length of its base and its height, h . Which of the following measurements best represents the area of the farmer's field?

- A $(50 \cdot 5\sqrt{3}) \text{ m}^2$
- B $(50 \cdot 30\sqrt{3}) \text{ m}^2$
- C $(50 \cdot 15\sqrt{3}) \text{ m}^2$
- D $(50 \cdot 10\sqrt{3}) \text{ m}^2$

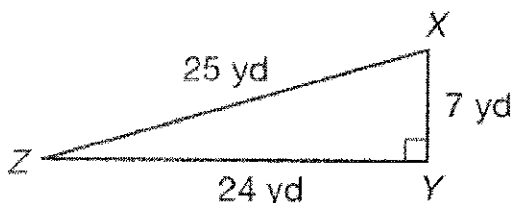
7. A surveyor 50 meters from the base of a cliff measures the angle of elevation to the top of the cliff as 72° . What is the height of the cliff? Round to the nearest meter.

8. **Grand Canyon Problem:** From a point on the North Rim of the Grand Canyon, a surveyor measures an angle of depression of 1° to a point on the South Rim. From an aerial photograph, he determines that the horizontal distance between the two points is 10 miles. How many **feet** is the South Rim below the North Rim to the nearest foot? (Note: 1 mile = 5280 feet)

9. At a point 125 feet from the base of a building, the angle of elevation to the third floor is 22° and to the 10th floor is 53° . How much higher is the tenth floor than the third floor?



Use the triangle below for questions 1 and 2.

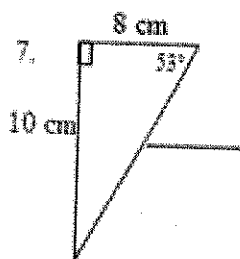


2. Which ratio is equivalent to $\tan X$?

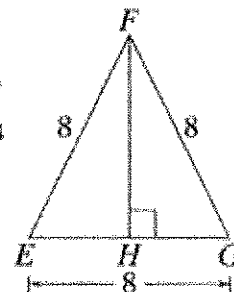
- A. $\frac{7}{24}$
- B. $\frac{7}{25}$
- C. $\frac{24}{25}$
- D. $\frac{24}{7}$

1. Which ratio is equivalent to $\sin Z$?

- A. $\frac{7}{24}$
- B. $\frac{7}{25}$
- C. $\frac{24}{25}$
- D. $\frac{25}{7}$



12. What is the length of the altitude \overline{FH} of equilateral triangle EFG at the right? (HINT: Find the measures of the angles first.)



No Calc on #3 & #5c

SHOW WORK!!

Trig Practice

• Round 1 decimal place!

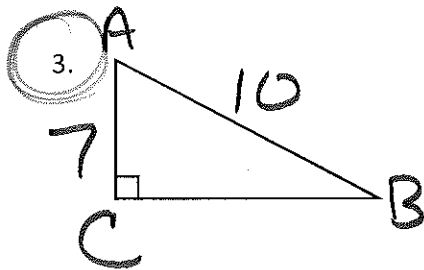
1. Use a calculator to find each

a) Value: $\sin 35^\circ$ _____ $\cos 60^\circ$ _____

b) Angle measure: $\tan A = \frac{3}{8}$ _____ $\cos B = .121$ _____

2. Solve each word problem.

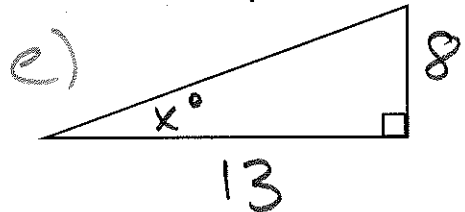
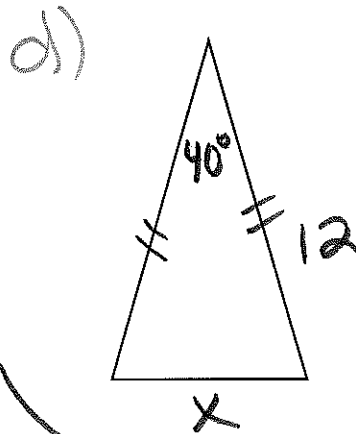
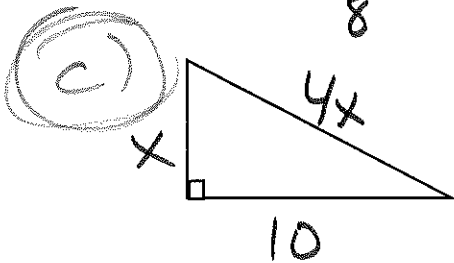
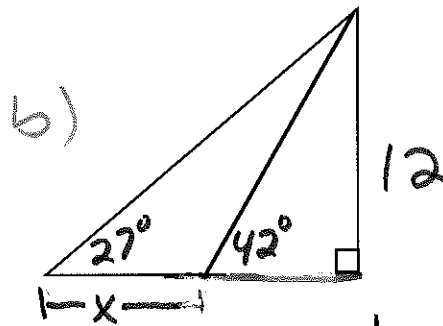
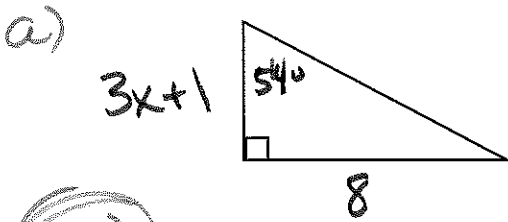
a) A building is 300 feet tall. If a man looks up to the top of it at a 13 degree angle of elevation, how far away from its base is the man standing?



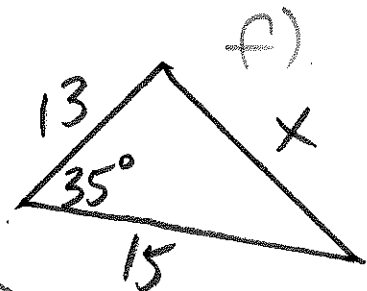
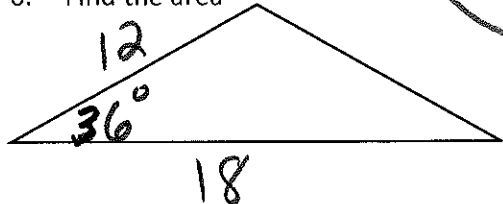
Find $\sin A$ _____ $\cos B$ _____ $\tan A$ _____

4. Find the lengths of the diagonals of a parallelogram whose side lengths are 20cm and 22cm, given that it contains a 70 degree angle.

5. Solve for each variable.

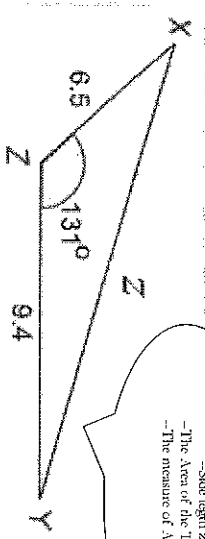
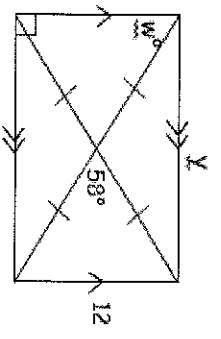
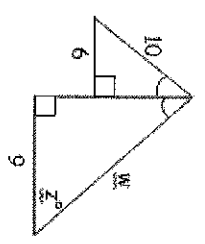


6. Find the area



a) Find $\tan B$ when $\cos B = \frac{8}{10}$

b) Find $\cos D$ when $\sin D = \frac{5\sqrt{3}}{10}$



Find
 -Side length z
 -The Area of the Triangle
 -The measure of Angle X