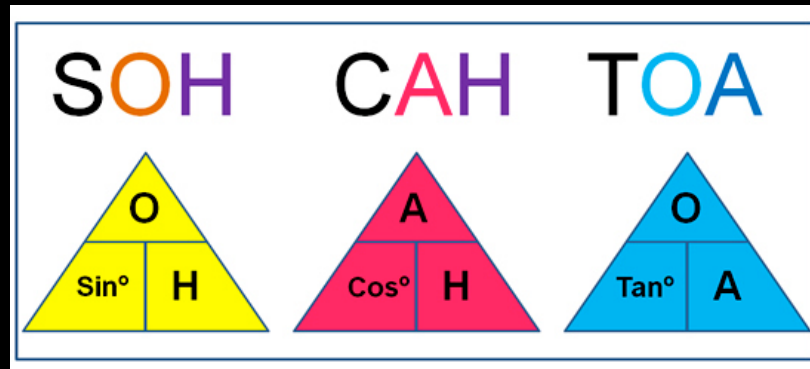
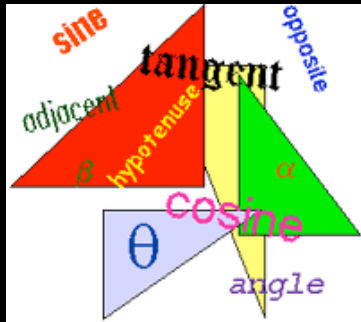


# Unit 5 Day 13



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Trigonometry Whiteboard Review

# TRIG TEST REVIEW

Get into groups of two, one person from your  
Needs to come get the following:

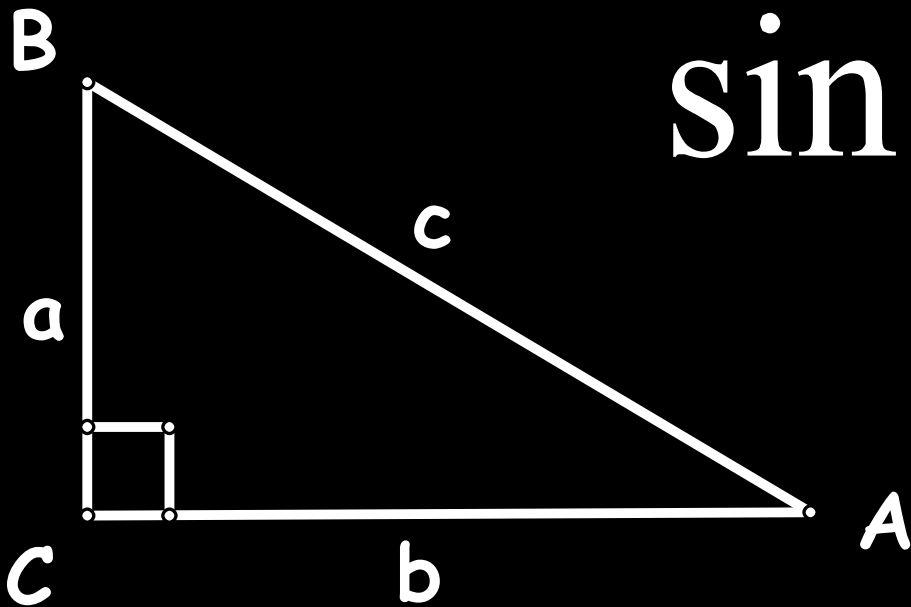
---

Whiteboard  
Expo Marker  
Eraser

Everyone should have a sheet of paper, calculator  
and pencil to take notes!

Complete the given Ratio:

---



$$\sin \angle A = \frac{a}{c}$$

# Solve the triangle

---

- If Angle A =  $42^\circ$ , Angle C =  $77^\circ$ ,  $c = 6$

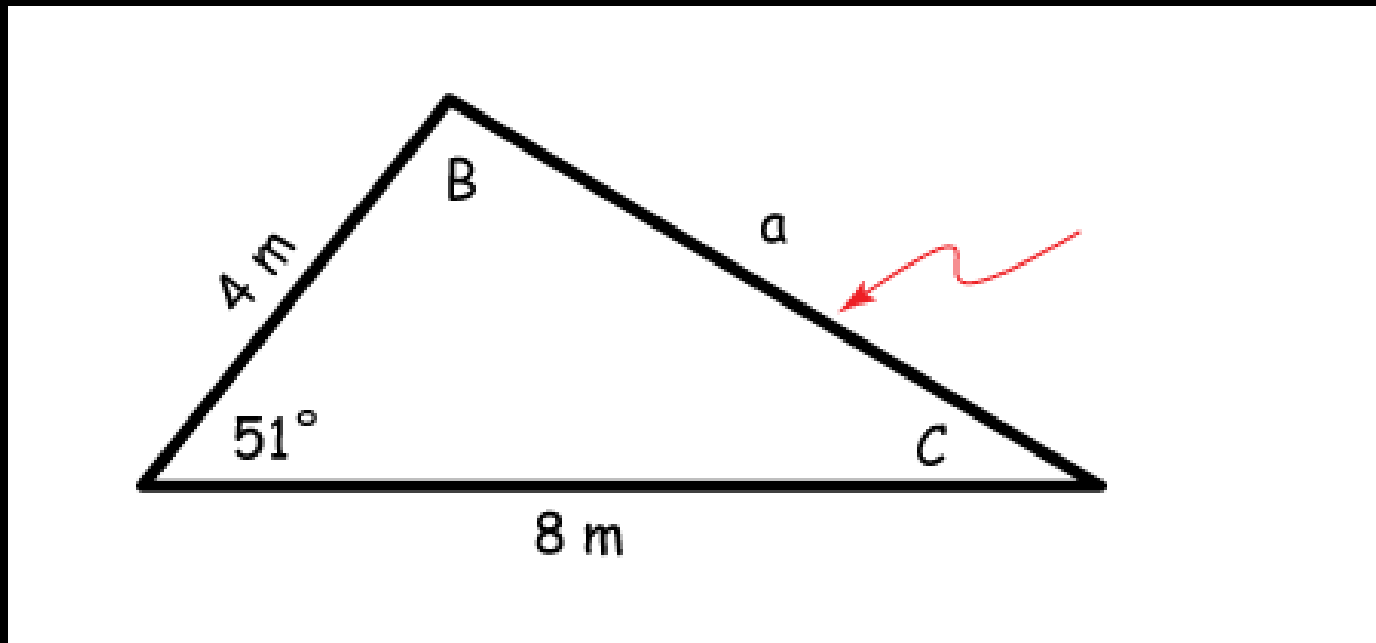
$$\text{Angle B} = 61^\circ$$

$$a = 4.1$$

$$b = 5.4$$

Solve for side a (to the tenths place)

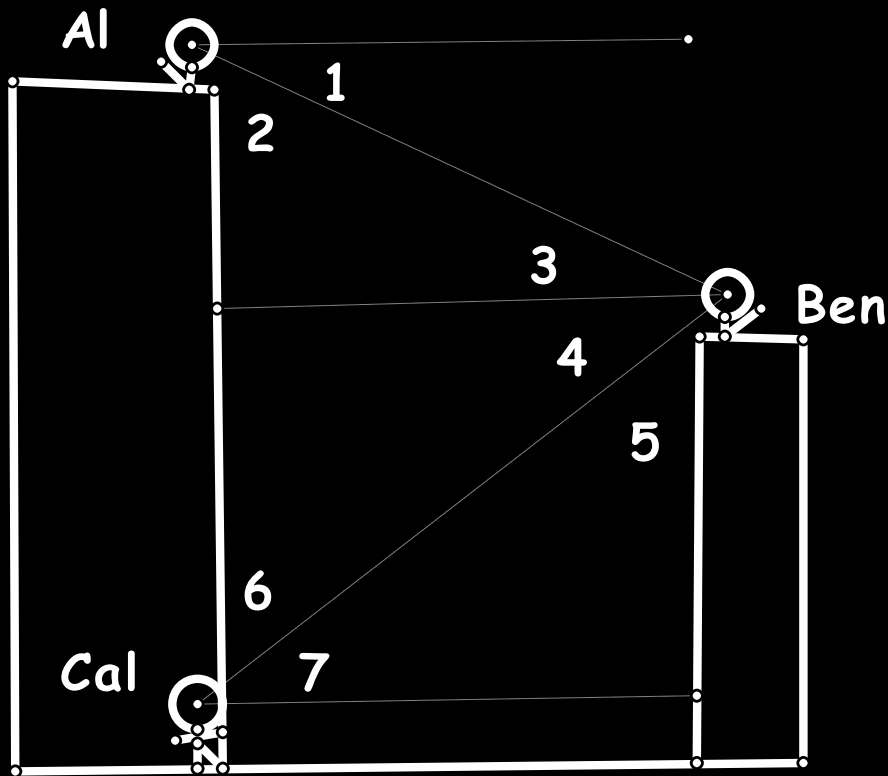
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$$a = 6.3$$

Which is the angle of depression for Ben as he looks at Cal?

---

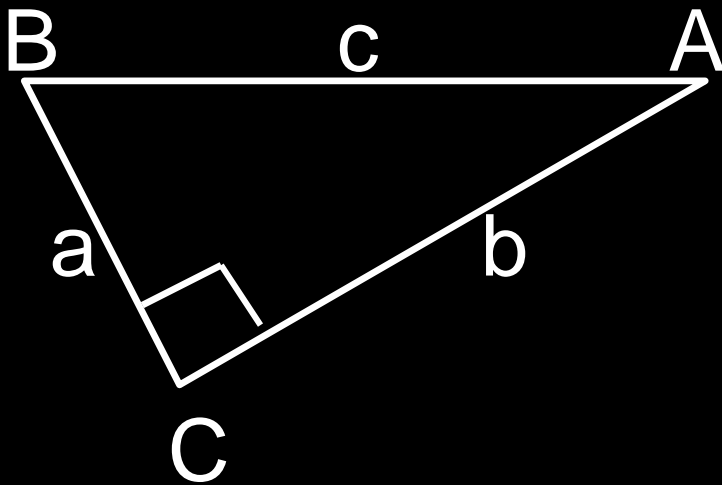


44

Complete the given Ratio:

---

$$\cos \angle A = \frac{b}{c}$$



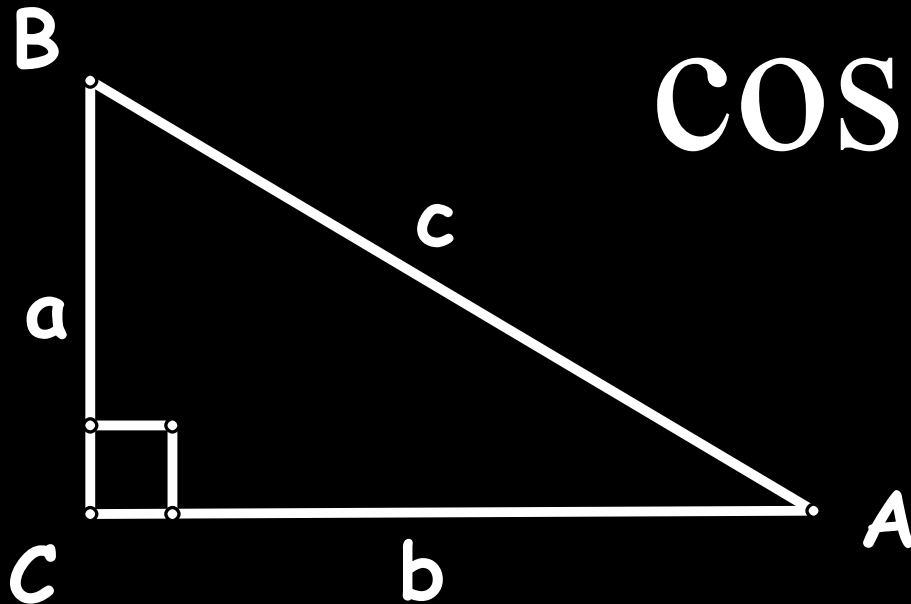
- 
- A person is standing 50 meters from a traffic light. If the angle of elevation from the person to the top of the traffic light is 25 degrees, find the height of the traffic light to the nearest meter.

23 meters



Complete the given Ratio:

---

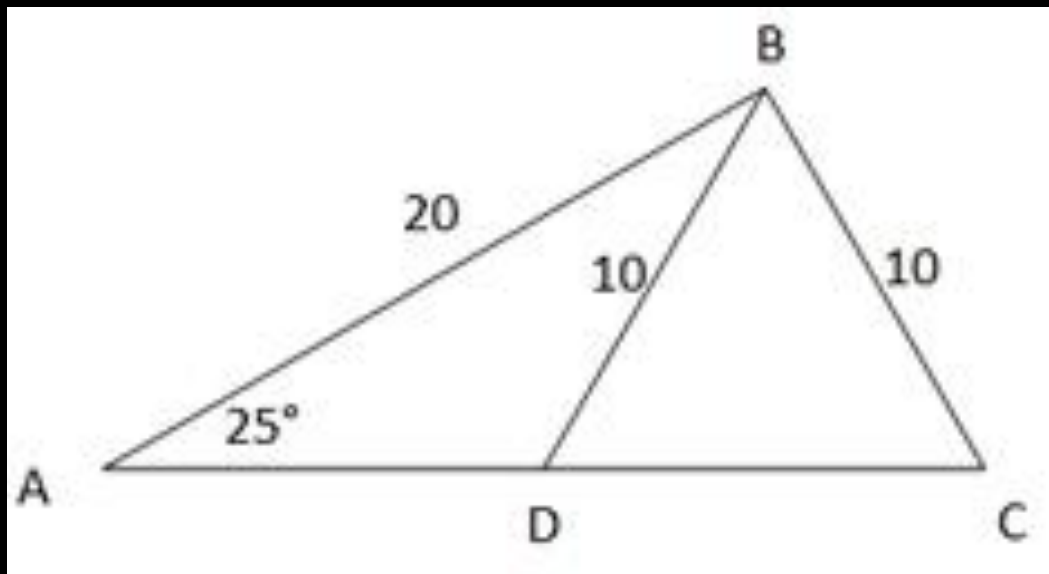


$$\cos \angle B = \frac{a}{c}$$

*Solve for  $m\angle C$  first, then find  $m\angle ADB$ .*

Round to the nearest whole degree.

Picture not drawn to scale.



$$m\angle ADB = 122^\circ$$

$$m\angle C = 58^\circ$$

Use your Calculator to find...

---

$$\cos 82^\circ \approx 0.1392$$

Find the amplitude, period, and  
midline.

---

■  $y = -2\cos(2x) + 3$

Amplitude: 2

Period:  $180^\circ$

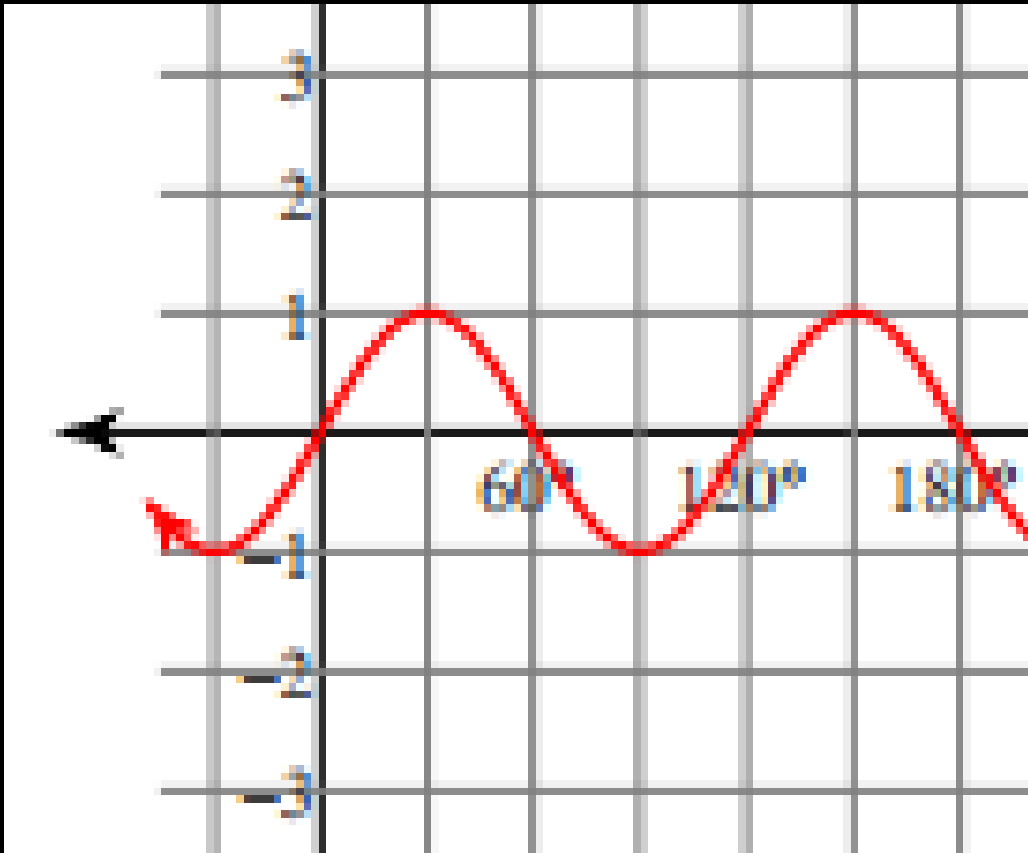
Midline:  $y = 3$

Fill in the Blank...

---

If  $\sin A = \cos B$  then  
Angle A and Angle B  
are complementary.

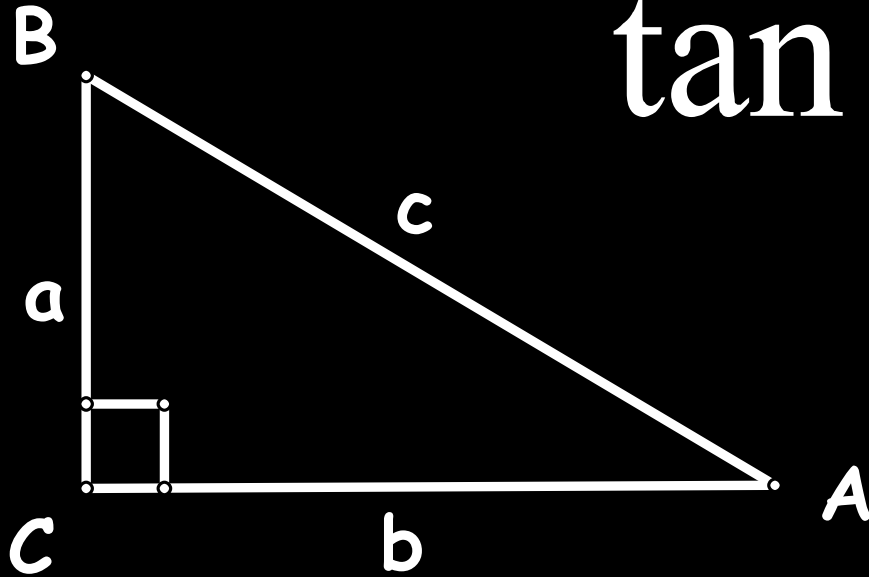
Write the equation of the trig function.



$$y = \sin(3x)$$

Complete the given Ratio:

---



$$\tan \angle B = \frac{b}{a}$$

Find  $x$ :

---

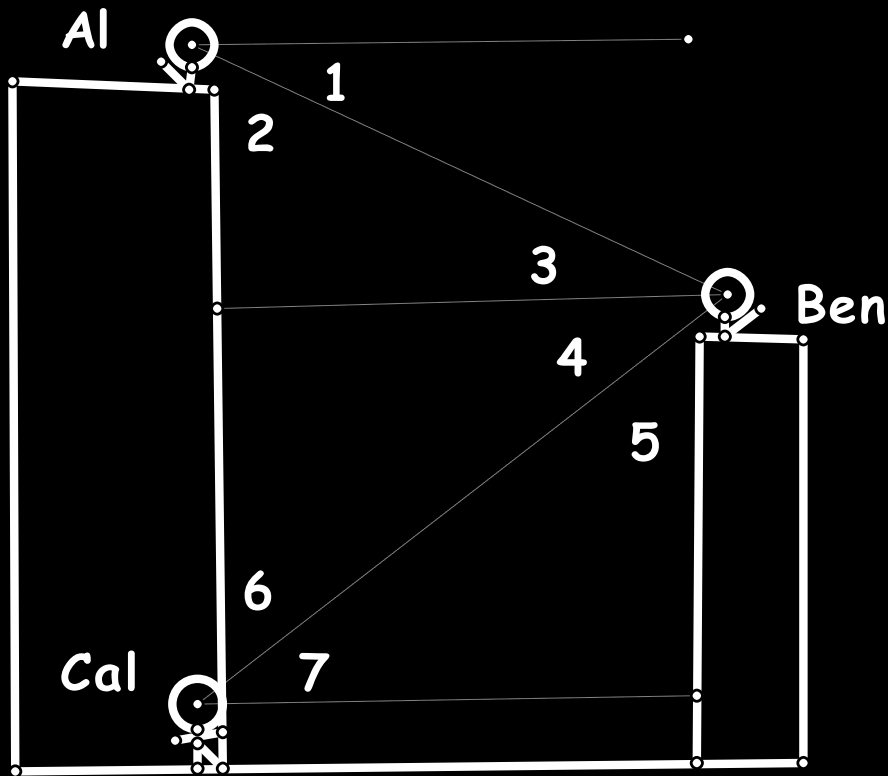
$$2 \sin(3x) \cos(x) = \cos(x)$$

$$x = 90^\circ, 10^\circ$$



Which is the angle of elevation for Cal as he looks at Ben?

---



47

Solve for x:

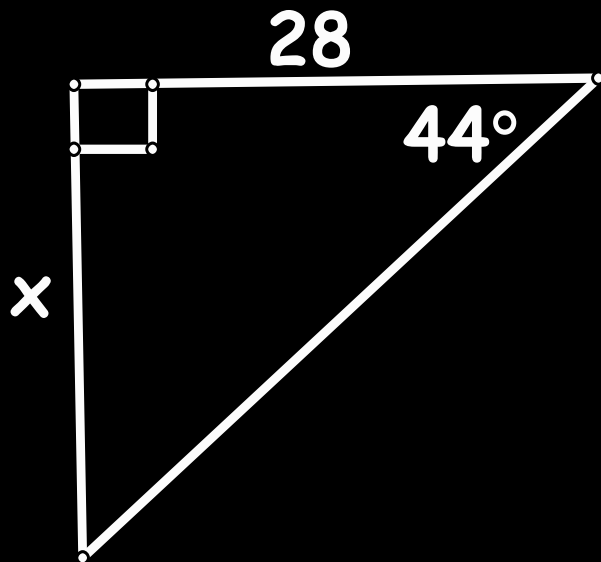
---

$$\sin 35^\circ = \frac{x}{20}$$

$$x \approx 11.47$$

Solve for x:

---

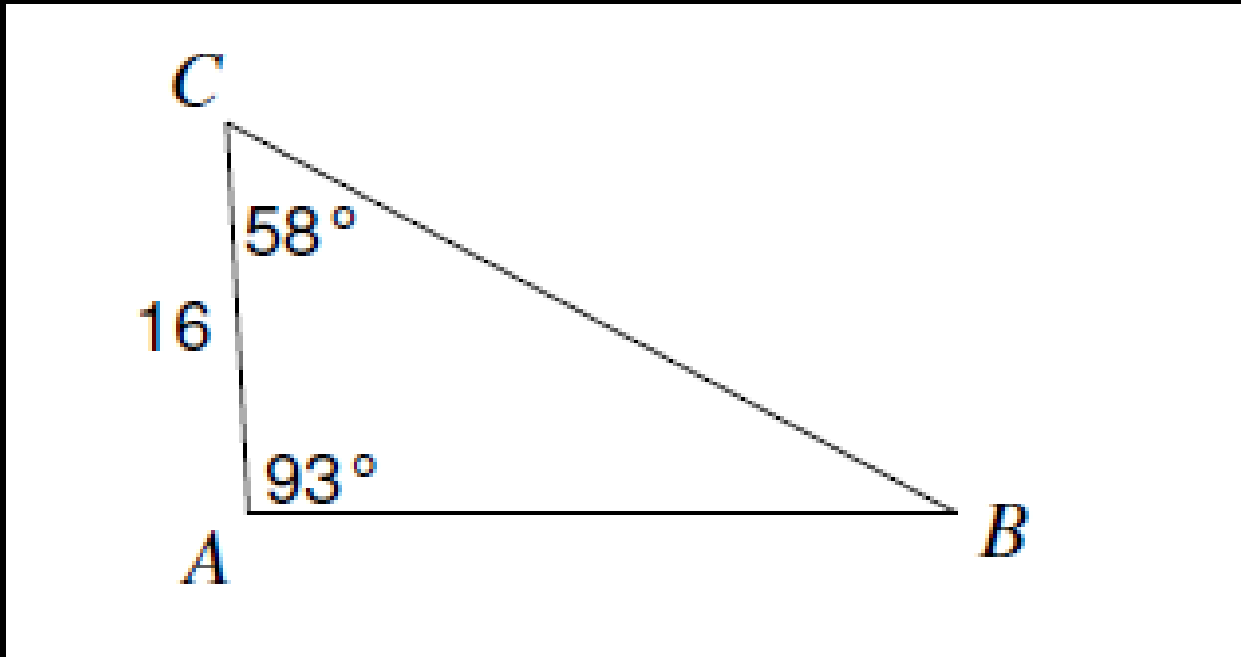


$$\tan 44^\circ = \frac{x}{28}$$

$$x \approx 27.04$$

Find  $B$ ,  $a$ , and  $c$

---



Angle  $B = 29^\circ$ ,  $a = 33$ ,  $c = 28$

Solve for x:

---

$$\tan 41^\circ = \frac{14}{x}$$

$$x \approx 16.11$$

Solve for x.

---

$$4\cos(x) - 6 = -5.2$$

$$x = 78.5^\circ$$

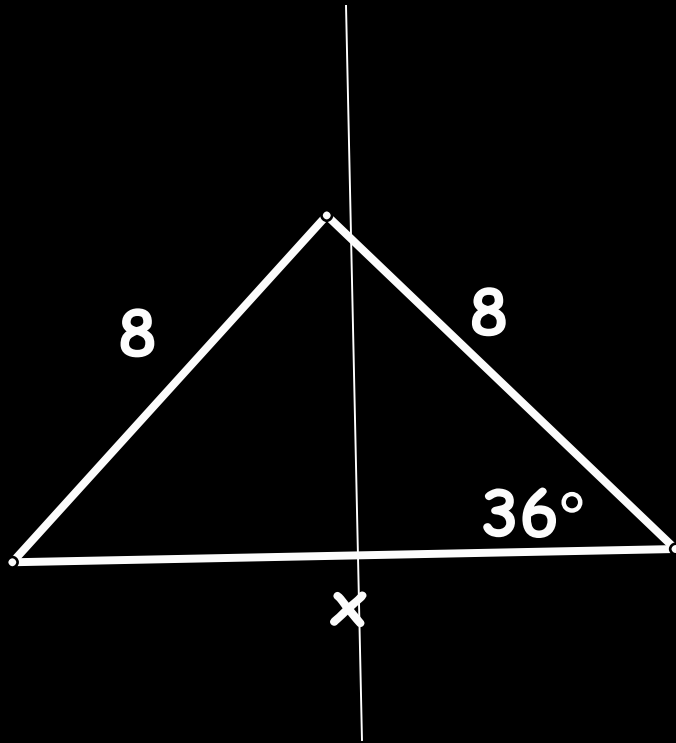
Use your Calculator to find...

---

$$\sin 23^\circ \approx 0.3907$$

Solve for x:

---



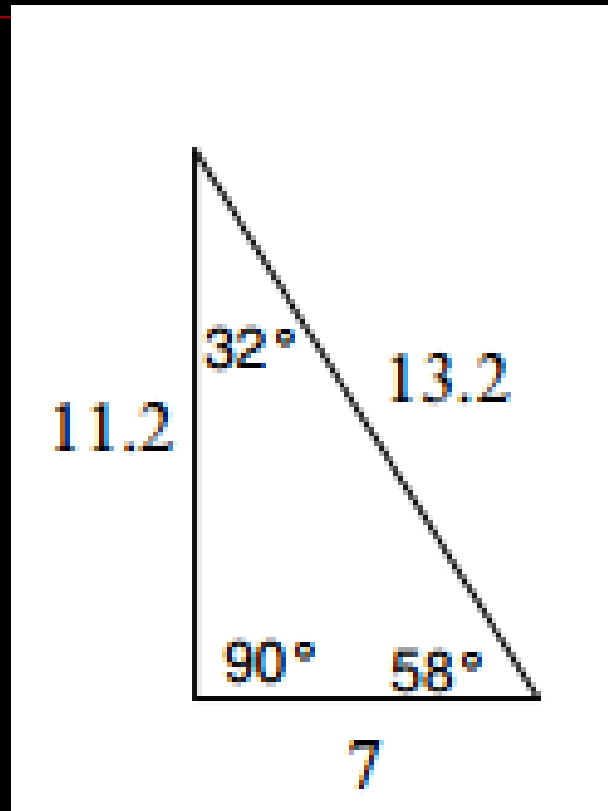
$$\cos 36^\circ = \frac{y}{8}$$

$$y \approx 6.47$$

$$x \approx 12.94$$



Classify the  $\Delta$  by sides and angles:



Scalene right

Solve for x:

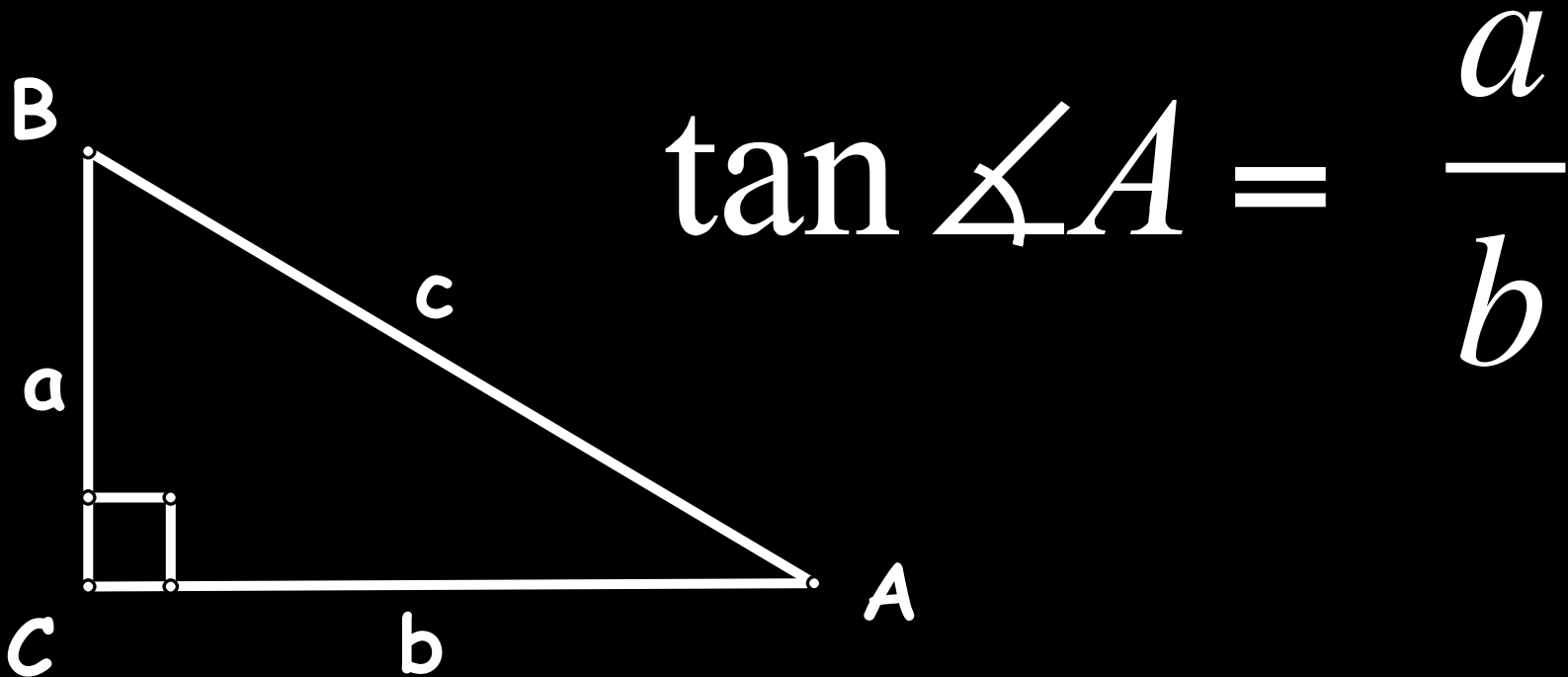
---

$$\cos 72^\circ = \frac{12}{x}$$

$$x \approx 38.8$$

Complete the given Ratio:

---



---

**Solve  $\triangle ABC$  if  $m\angle A = 25^\circ$ ,  $a = 125$ , and  $b = 150$ .**

Case 1:

Angle B = 30

Angle C = 125

$c = 242$

Case 2:

Angle B = 150

Angle C = 5

$c = 26$

Solve for x:

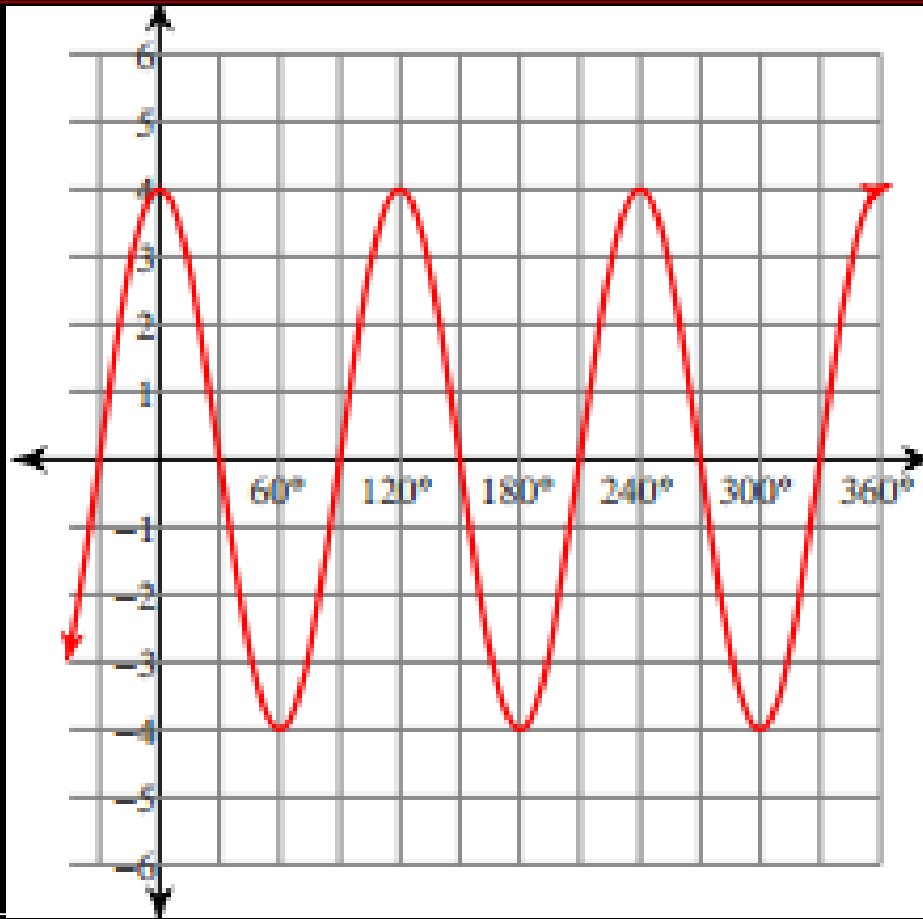
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$$\cos x^\circ = \frac{11}{13}$$

$$x \approx 32.2^\circ$$

Write the equation of the trig  
function.

$$y = 4\cos(3x)$$



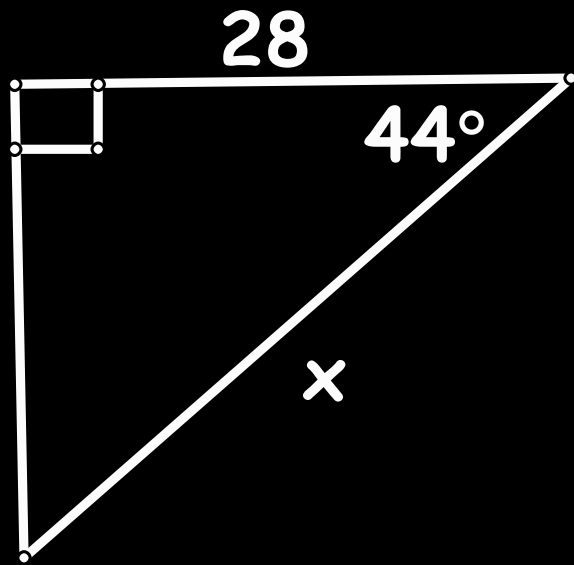
Fill in the blank....

---

$$\cos \underline{40}^{\circ} = \sin 50^{\circ}$$

Solve for x:

---



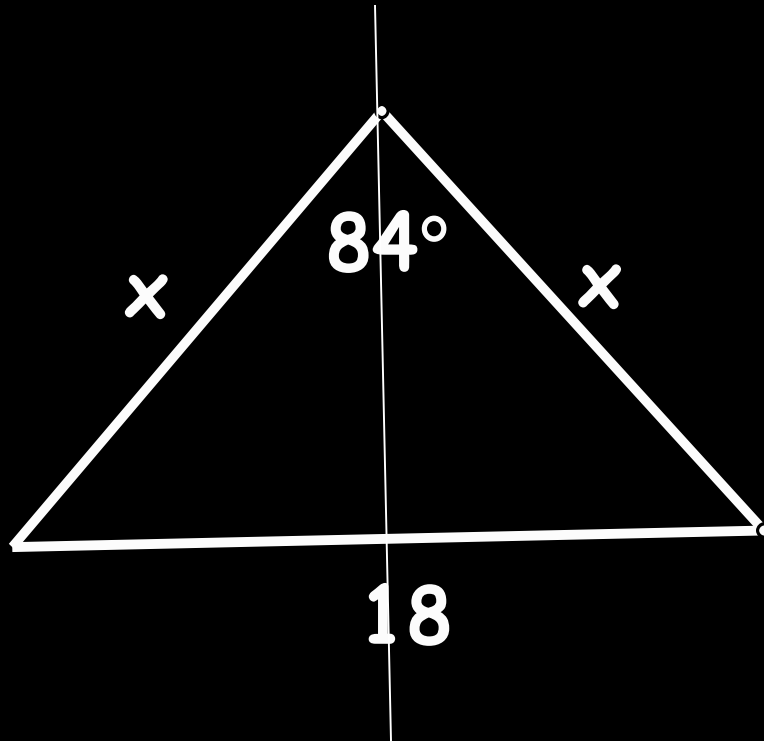
$$\cos 44^\circ = \frac{28}{x}$$

$$x \approx 38.9$$



Solve for x:

---



$$\sin 42^\circ = \frac{9}{x}$$

$$x \approx 13.45$$

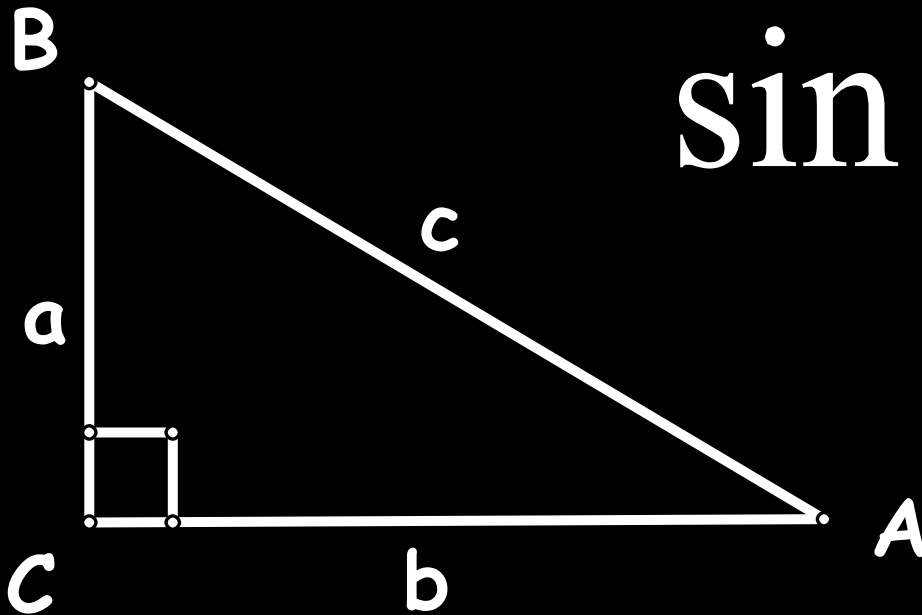
---

A cliff is 90 feet above the sea. From the cliff, the angle of depression of a boat measures 46 degrees. How far is the boat from the base of the cliff?

86.9 feet

Complete the given Ratio:

---



$$\sin \angle B = \frac{b}{c}$$

# Solve the triangle

---

- If Angle R =  $37^\circ$ ,  $q = 8$ ,  $p = 11$

$$\text{Angle Q} = 43$$

$$\text{Angle P} = 100$$

$$r = 7$$

# Find the area:

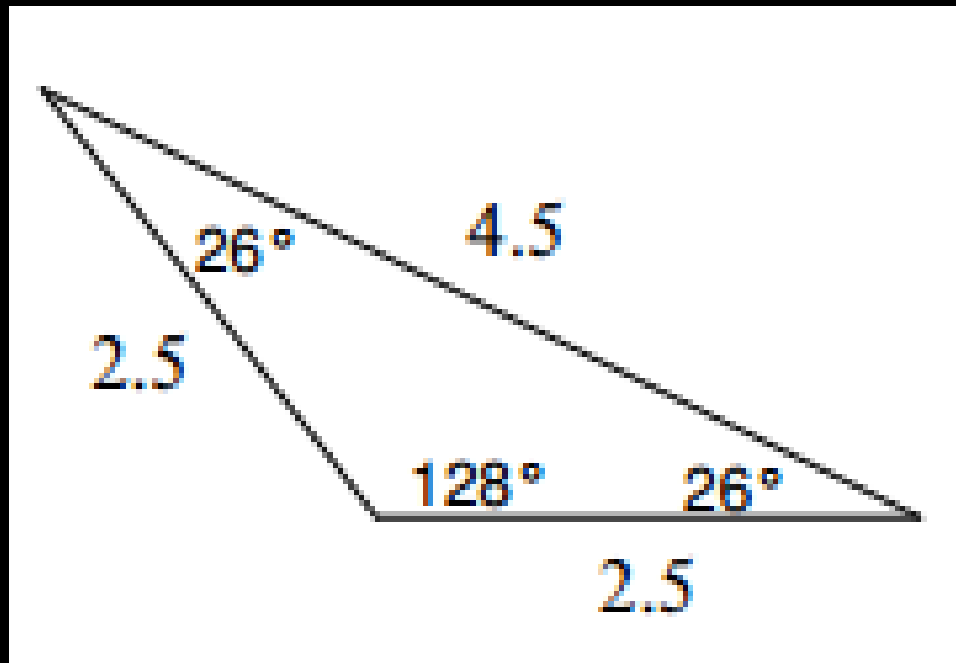
---

- If Angle R =  $37^\circ$ ,  $q = 8$ ,  $p = 11$

$$\text{Area} = 26.5$$

# Classify the $\Delta$ by sides and angles

---



Obtuse isosceles

Find the amplitude, period, and midline.

---

■  $y = (1/2)\sin(3x) - 5$

Amplitude:  $\frac{1}{2}$

Period: 120

Midline:  $y = -5$

---

THE END!!



# Homework Information

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Packet Page 27 - 30 ALL

\*Print Cumulative Review HW  
(for after Unit 5 Test)

Make sure to study for your TEST!!