Learning Objective:	To: Use SOHCAHTOA to find Missing Sides	Name:	
		Date:	

Do NOW Activity:

1 **Work out** $\frac{5}{6} \div \frac{5}{9}$

2 **Work out** 0.25^2

3 **Evaluate** 10^5

4 **Expand** $x(xy - 5)$

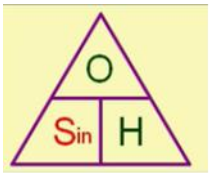
5 **Express** the speed 15 m per second as km per hour

PRIOR KNOWLEDGE CHECK:

1. I can identify and use the correct trigonometric ratio.

THE MAIN EVENT

FACTS



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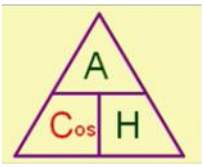

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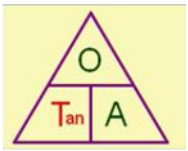
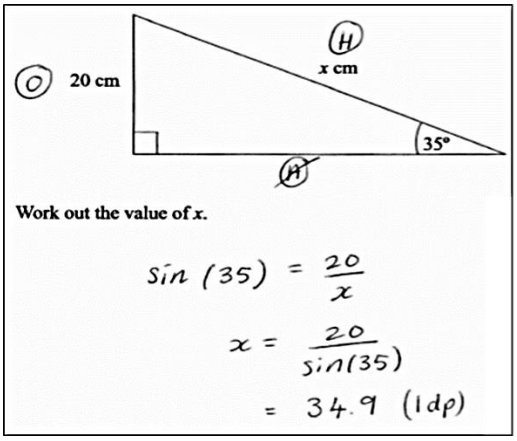
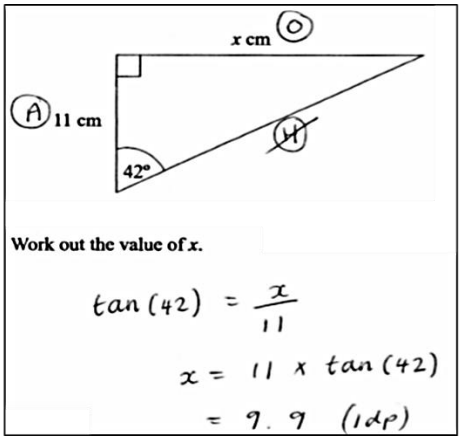
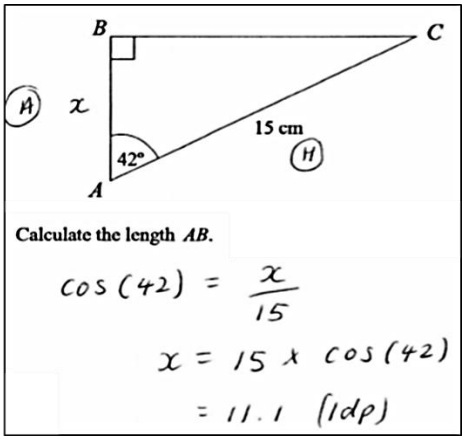


TANGENT

EXAMPLE #1:







PRACTICE #1:

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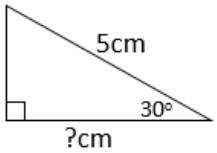

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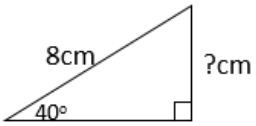

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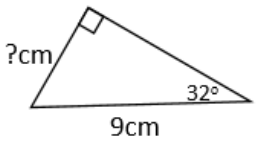

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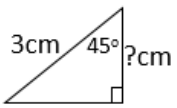

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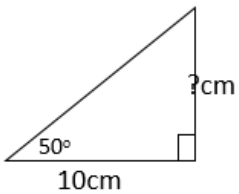

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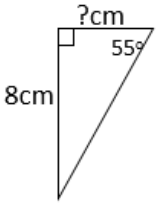

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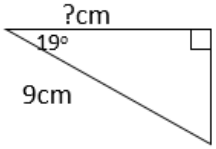

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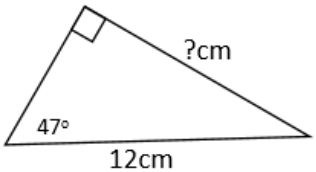
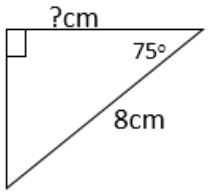
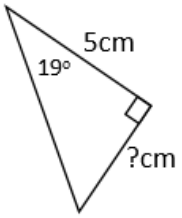
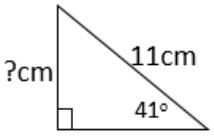
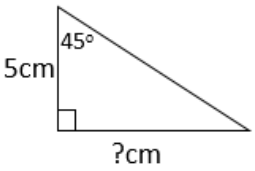


9. 

10. 

11. 

12 

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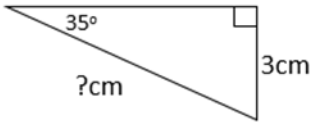
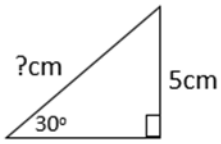
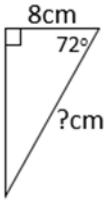
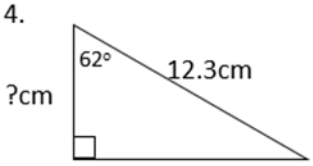
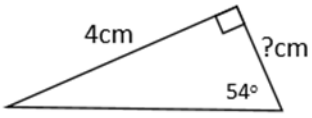
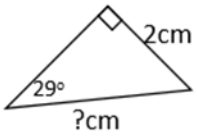
1. 

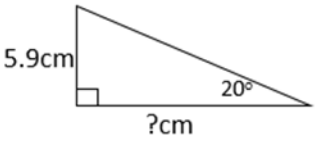
2. 

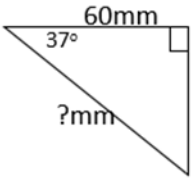
3. 

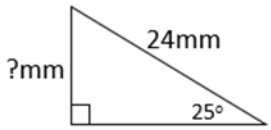
4. 

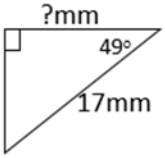
5. 

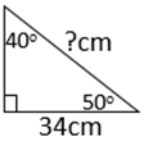
6. 

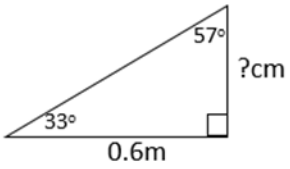
7. 

8. 

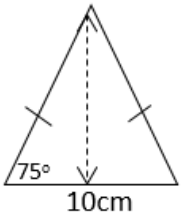
9. 

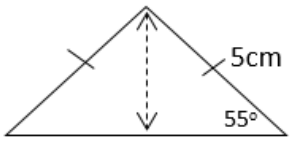
10. 

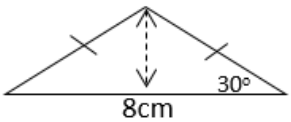
11. 

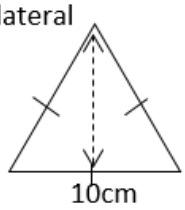
13. 

PRACTICE #3: Find the height of each triangle

1. 

2. 

3. 

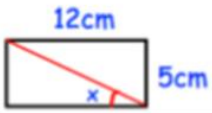
4. equilateral 

APPLICATION

Question 1: A 4 metre long ladder is placed against a wall. The angle between the ladder and the ground is 75°. How far up the wall does the ladder reach?

Question 2: A ladder is placed against a wall. The base of the ladder is 4 foot from the bottom of the ladder. The angle between the ladder and the ground is 80°. What is the length of the ladder?

Question 3: A rectangle is 12cm long and 5cm wide. Find the size of the angle marked x.



Question 4: (a) Find the length of AC.
(b) Find the length of AB.
(c) Find the perimeter of triangle ABC.
(d) Find the area of triangle ABC.