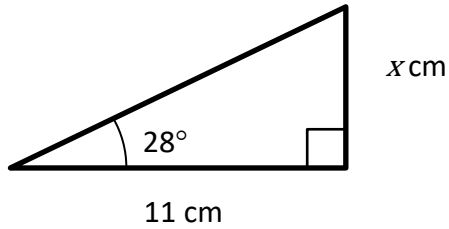**TRIGONOMETRY**

Name:

<u>BAM Indicator:</u> Apply trigonometry in two dimensions

F

1. a) Find the missing lengths marked x in these diagrams:
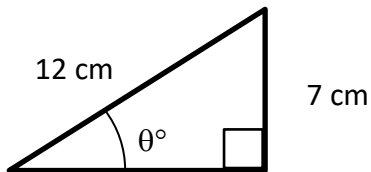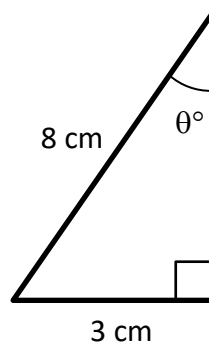
i)

x cm

28°

11 cm

ii)

7 cm

35 °

x cm

_____   _____
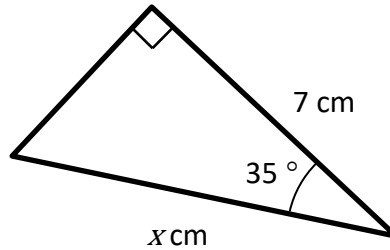
b) Find the missing angles marked θ in these diagrams:
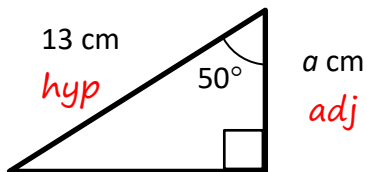
i)

12 cm

7 cm

θ°

ii)

8 cm

θ°

3 cm

_____   _____

2. There are <u>**two**</u> mistakes made in the working below.
Describe the mistakes that have been made. Find the correct solution.

M

13 cm

hyp

50°

a cm

adj

$a = 13 \div \sin 50 = 16.97029...$

$a = 16.97$ cm (2 d.p.)

3. A ladder, 6 metres long, rests against a wall. The foot of the ladder is 2.5 metres from the base of the wall. What angle does the ladder make against the ground?

A

_____

4. The diagram shows the cross-section of a building. *CD* is a ledge half way up.
   Amy is standing at point *A* looking at the building. She measures AB = 100 metres, $\angle CAB = 31^\circ$ and $\angle EAB = 42^\circ$.
   Calculate the length of CD.

P
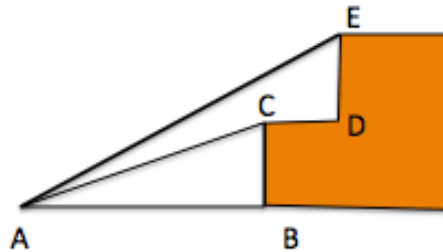
CD = _____ m

5. Jason says:

   I only need to know two pieces of information about a triangle and I can find any missing side or angle.

   Do you agree or disagree? Explain why.

R

Overall, I think my success level is:	Low High
	○ ○ ○ ○

F = Fluency   R = Reasoning   P = Problem-solving   A = Application   M = Misconception

Q	TRIGONOMETRY	☺	☹
	I can correctly label a triangle so as to select the appropriate trigonometric ratio		
	I can find missing sides of right-angled triangles using trigonometry		
	I can find missing angles of right-angled triangles using trigonometry		
	I can apply trigonometry to problems involving multiple triangles		
Improvements I could make:			

Mathematical presentation	Method	Accuracy	Units