Mathematics Assignment Solution

1a. 2sin 60° - cos 30°

2sin 60° - sin(90-30)°

2sin60° - sin 60°

Sin 120° - sin 60°

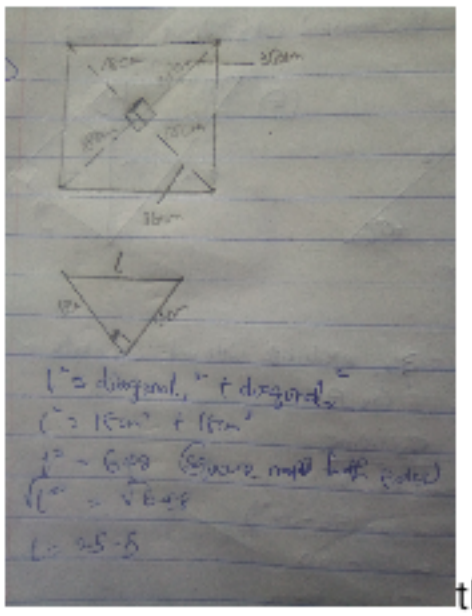
Sin 60°.

1b. 2tan 45° - tan 60°

2tan 45° - 2tan 30°

15°.

2.



this is the solved solution to question 2.

3. Provided that sin x = 0.6

2cosx + 3sinx

2sin(90-0.6) + 3sin0.6

1.999 = 2.000 + 0.0314

2.0314

4a. Using Soh Cah Toa

Cos 60° = 6/x

Cos60°x/cos60° = 6/cos60°

X = 6/cos60

X = 12.

Tan 60° = y/6

Y = 10.39

4b. Using Soh Cah Toa.

Sin 30° = x/6
Sin30° × 6 = x
X = 3cm
Cos 30° = z/6
Z = cos30° × 6
Z = 5.2cm.
Still on the same triangle where there are two triangles.
Using Soh Cah Toa.
Sin 45° = y/3
Y = 2.12cm

To find the adjacent of that sane triangle labelled II
Still using Soh Cah Toa.
Cos 45° = adj/3
Adj. = cos 45° × 3
Adj. = 2.12cm.
5. Tan Ø = 3/4
2sin Ø - cos Ø
2sin 36.9° - sin(90-36.9)°
2sin 36.9° - sin 53.1°
Sin 73.8° - sin 53.1°
Sin 20.61°.