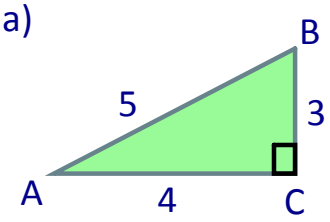
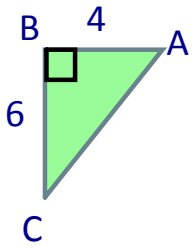
6.3B The Tangent, Sine and Cosine Ratios- Day 2

Ex. 1 Solve for ∠A using two different ratios.

a)



b)



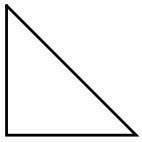
Ex. 2 From a point 45 m from the base of WCSS the angle of elevation to the top of the school is 30°. What is the height of the school to the nearest metre?

To "Solve" a triangle means to determine all side lengths and all angle measures that aren't given in the question.

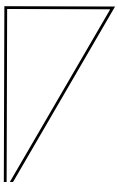
Tools: sum of angles in a triangle is _____ [angles]
pythagorean theorem [sides]
trigonometric ratios [angles & sides]

Solve the following triangles.
Include a labelled diagram as part of your solution.

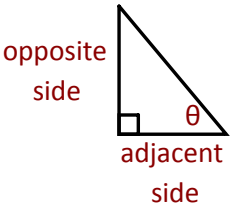
Ex. 3 In $\Delta ABC, \angle B = 90^o$, c = 5cm and a = 11 cm.



Ex. 4 In $\Delta DEF, \angle F = 90^o, \angle E = 23^o$ and f= 82 m.

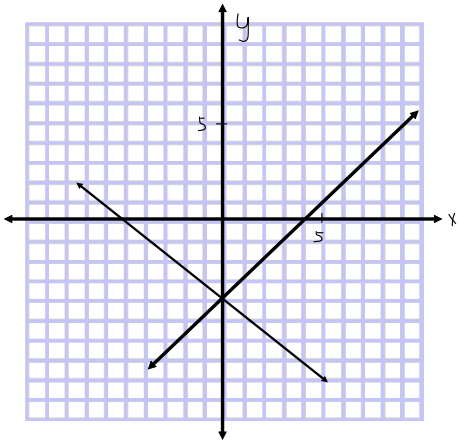


Ex. 5 Find the height of a tree to the nearest metre given the tree's shadow is 14m and the angle to the top of the tree from the ground is 25^0.



$$\tan\theta = \frac{\text{opposite}}{\text{adjacent}}$$

Ex. 6 Find the equation of a line that makes an angle of 45^0 with the x-axis and has a y-intercept of -4.



Homework

Pg. 363 #11,13,15,16

Pg. 375 # 12a,13,16,19,24,26