1. Sketch
   a. $y = sin(x)$ for $0° \leq x \leq 360°$
   b. $y = cos(x)$ for $-180° \leq x \leq 180°$
   c. $y = tan(x)$ for $-90° \leq x \leq 360°$

2. Sketch, for $0° \leq x \leq 360°$,
   a. $y = 3cos(x)$
   b. $y = -2sin(x)$
   c. $y = 2cos(x) - 1$
   d. $y = 2 + 3sin(x)$
   e. $y = -tan(x) - 2$

3. Sketch, for $-180° \leq x \leq 180°$,
   a. $y = \frac{1}{4}(2 + tan(x))$
   b. $y = -\frac{3}{4} + 2sin(x)$
   c. $y = \frac{1}{2}cos(x) - 3$
   d. $y = 2 + \frac{3}{2}tan(x)$
   e. $y = -sin(x) - \frac{2}{3}$

4. ABC is a right angle triangle. Angle $B = 90°$, angle $A = 36°$, and side AB = 3.7cm. Find sides BC and AC.

5. PQR is a right angle triangle. Angle $P = 90°$, angle $Q = 60°$, and side QR = 32cm. Find side PQ and PR.

6. In triangle RST angle $R = 90°$, angle $S = 43°$, and side RT = 5.8cm. Find side RS and side ST.

7. DEF has a right angle at B. If side DE = 12.5cm and side EF = 5cm, find side DF, angle A, and angle B.

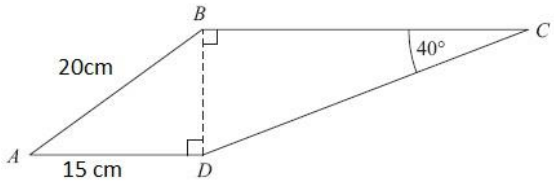
8. ABC is a right angled triangle. Angle $B = 90°$, AC = 10.6cm and BC = 8.2cm. Find angle C to 3 significant figures.

9. Triangle LMN has a right angle at M. MN = 5cm and LN = 8cm. Find angle N and side LM to 1 decimal place.

10. PQ = 12.5cm, angle $P = 90°$ and angle $Q = 40°$ in triangle PQR. Find the remaining sides and angles to 2 decimal places.

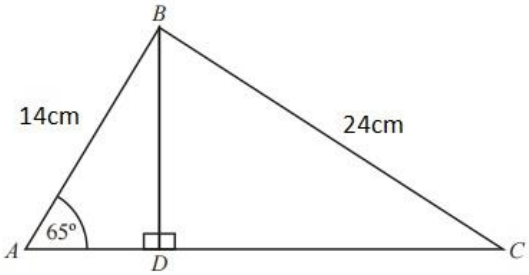
11. Angle B is $110°$, side AB is 9cm and side BC is 15cm in triangle ABC. Find
    a. side AC
    b. angle A
    c. the area of triangle ABC

12. Consider quadrilateral ABC.



    a. Find the length of BD
    b. What is the size of angle ABD?
    c. Calculate the length of DC to 3 decimal places.

13. Considering the diagram,



    a. find the length of BD
    b. work out the size of angle BCD, and
    c. establish the length of AC.