AVU Paper 2 – Practice 3

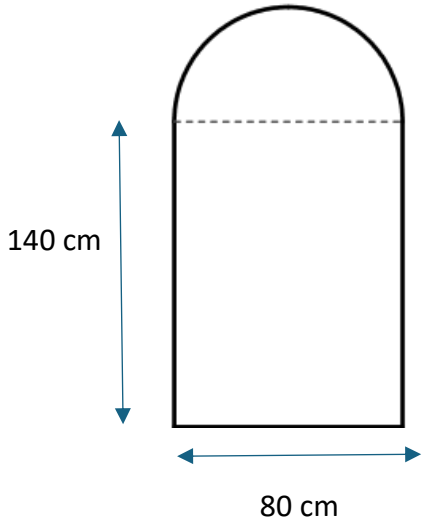
1. Solve $4x - 1 = 3x + 3$

2. Find the total area of the shape below,

   Note: Area of a half circle: $A1 = \pi r^2 \div 2, radius = 40\ cm$

   Area of a rectangle: $A2 = L \times B$

   Total Area: $Atotal = A1 + A2$



3. (a) Complete the table below

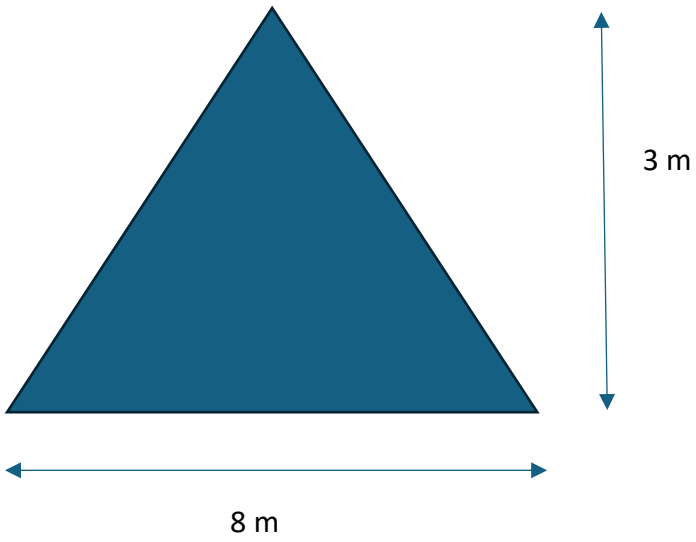
K	1	2	3	4	5	6
L	4	7	10	?	?	?

(b) Write down a formula that connects L and K, L = ?K + ?

(c) If L = 25, use the formula to find K

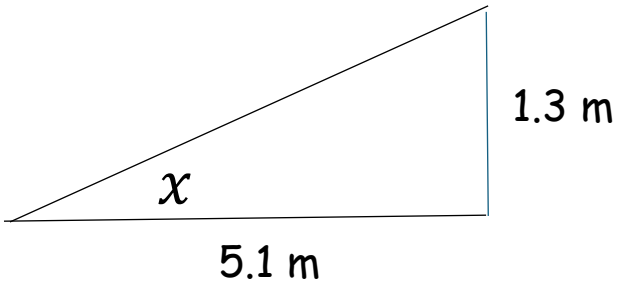
4. Use the formula $S = \frac{D}{T}$, to find the speed if D = 21 km and T = 4 hours 24 minutes (note, change to decimal time first, eg divide 24 by 60)

5.



Note: Split the triangle in two then use Pythagoras $a^2 = b^2 + c^2$ to find the perimeter of the above shape (distance all the way round the triangle)

6.



Use SOH – CAH – TOA to find angle x (Draw triangle, label sides, write SOH-CAH-TOA, tick and solve!)

7. Box A contains 4 red and 5 white stones

Box B contains 7 red and 9 white stones

By converting both to decimals (divide top by bottom) which box has the greatest probability of picking a red stone?