Ex 25 Trigonometry Graphs

Section A (Non-calculator)
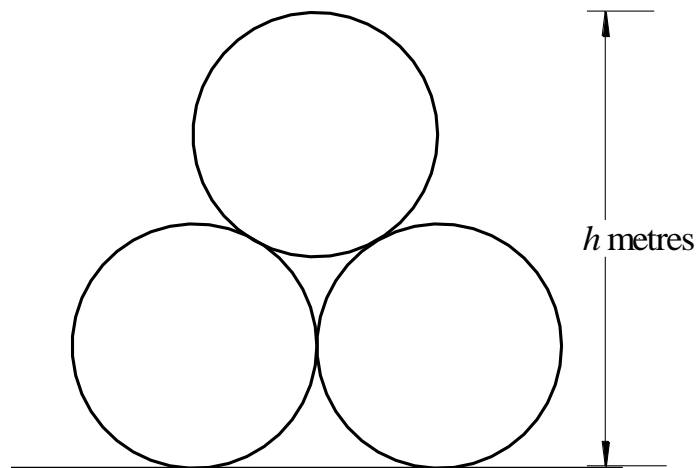
1   A straight line is represented by the equation $x + y = 5$ Find the gradient of this
     line.

2   Algebraically, find the point of intersection of the straight lines with equations
     $x + 2y = -5$ and $3x - y = 13$

Section B (Knowledge)

3   For $0 \leq x \leq 360$, on separate diagrams sketch the graphs of :
     (a) $y = \cos x°$ (b) $y = \cos 2x°$ (c) $y = 2 \cos x°$

4   For $0 \leq x \leq 360$, on the same diagram sketch the graphs of $y = \sin x°$
     and $y = 2 + \sin x°$.

Section C (Reasoning)

6   Three pipes are stored on horizontal ground as shown in the diagram below.

     Each pipe has a circular cross-section with radius 2 metres.

     Calculate the height, h metres of the stacked pipes. (Ignore the thickness of the
     pipes.)

     Give your answer in metres, correct to two decimal places.

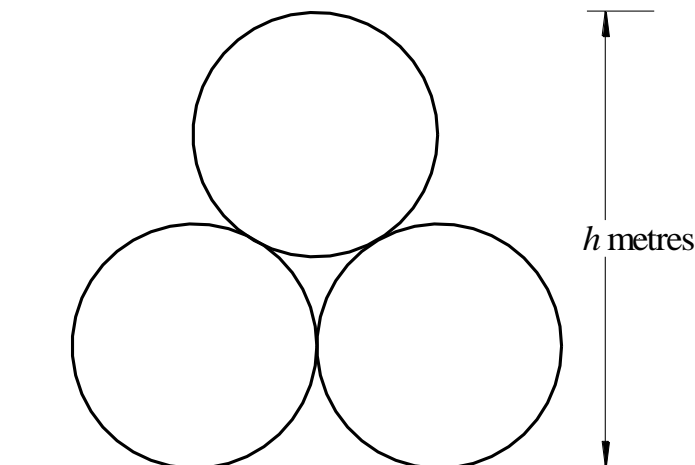### Ex 25 Trigonometry Graphs

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