

# **Sec 4 Maths**

Exam papers with worked solutions

## **SET A PAPER 1 Answer**

Compiled by

**THE MATHS CAFE**

Answer Key

1. (i)  $2.71\text{m/s}^2$  (ii)  $5.68\text{m}$

2.  $(4, 0), (8, 0)$  vertex  $(6, -1)$   $- \leq y \leq 3$

3. (i) y coordinate of B is 4 (ii)  $\pi$  units<sup>2</sup>

4. (a)  $199\frac{1}{9}$  (b)  $n = 9, a = \frac{1}{3}$

5. (b)  $R = 36.7$   $\alpha = 60.6^\circ$  (c)  $\max A = 36.7$   $x = 29.4^\circ$  (d)  $41.6^\circ$

6. (i) 1.26 (ii)  $x = 4, 16$

7. (ii)  $13\frac{1}{3}$  (iii) 2 units/s

8.  $p = 16\frac{2}{3}$  (i)  $\frac{q}{p} = 3.8$   $q = 63\frac{1}{3}$  (ii)  $\frac{1}{x^2} = 0.38$   $x = 1.62$

9. (a)  $\tan x = -2$  (b) (i)  $\cos\theta = -\frac{\sqrt{10}}{10}$  (ii)  $-\frac{3}{5}$  (iii)  $\frac{24}{25}$

10 (i) A  $(8, -1)$  (ii)  $k = -5$  (iii) C is  $(0, -7)$  (iv)  $2y + x + 14 = 0$

area of  $\Delta ABC = 40$  units<sup>2</sup>, distance is 8.94 units