

2	$\binom{6}{2} \times (2x^2)^2 \times \left(-\frac{3}{x}\right)^{6-2}$ or $\binom{6}{2} \times 2^6 \times (x^2)^2 \times \left(-\frac{3}{2x}\right)^{6-2}$
	Identifying the relevant term of the form: $k \times (2x^2)^2 \times \left(-\frac{3}{x}\right)^{6-2}$ or $k \times 2^6 \times (x^2)^2 \times \left(-\frac{3}{2x}\right)^{6-2}$
	= 4860

1	Use of $b^2 - 4ac$
	Obtain $k^2 - 20k + 64$
	Attempt solution of quadratic equation or inequality
	Obtain $k < 4$, $k > 16$ or clear equivalent

1	$6\sin^2 \theta - \sin \theta - 2 = 0 \Rightarrow [(2\sin \theta + 1)(3\sin \theta - 2) = 0]$
	$\sin \theta = -\frac{1}{2} \text{ or } \sin \theta = \frac{2}{3}$
	$\theta = -150^\circ, -30^\circ, 41.8^\circ, 138.2^\circ$

1	{Stretch} {factor 2} {'parallel to y-axis' or 'in y-direction' or 'vertically'}
	{Translation} $\begin{pmatrix} \{0\} \\ \{-14\} \end{pmatrix}$ or $\{-14\}$ {'parallel to the y-axis' or 'in the y-direction' or 'vertically'.}
	Alternative Method for Question 1
	{Translation by} $\begin{pmatrix} \{0\} \\ \{-7\} \end{pmatrix}$ or $\{-7\}$ {'parallel to the y-axis' or 'in the y-direction' or 'vertically'}
	{Stretch} {factor 2} {'parallel to y-axis' or 'in y-direction' or 'vertically'}

2

$$2\left(\frac{-y-4}{2}\right)y + 5y^2 = 24$$

$$\text{or } 2\left(\frac{24-5y^2}{2y}\right) + y + 4 [= 0]$$

$$\text{or } 2x(-4-2x) + 5(-4-2x)^2 = 24$$

$$4y^2 - 4y = 24 \quad \text{or} \quad 16x^2 + 72x + 56 [= 0]$$

$$\Rightarrow y = -2, y = 3 \quad \text{or} \quad x = -1, x = -\frac{7}{2}$$

$$(-1, -2), \left(-\frac{7}{2}, 3\right)$$

3

$$\binom{5}{3} \text{ or } \binom{5}{2} \text{ or } 10 \times (px^2)^{5-3} \times \left(\frac{4}{p}x\right)^3$$

$$10p^2 \times \frac{64}{p^3}$$

$$\frac{\text{Their integer } k}{p} [x^7] = 1280[x^7]$$

$$p = \frac{1}{2}$$