Section A

1	Enlargement Scale factor $\frac{1}{3}$ Centre (–3,0)	[1] [1] [1] **[3]**	0 if any other transformation mentioned
2	**(a)** Yes, No, No, Yes, No **(b)** Prime factors of denominators are 2 (or 5) only.	[2] [1] **[3]**	1 for 3 correct.
3	**(a)(i)** $2a^8$ **(ii)** $4y^5$ **(b)** $x^2 + 3x - 18$ **(c)(i)** $x(3y - 4)$ **(ii)** $\frac{7}{3y-4}$ **(d)** $9n - 6$	[1] [1] [2] [1] [1] [2] **[8]**	M1 for 2 correct terms or 3 out of $x^2 - 3x + 6x - 18$ seen. 1st bracket essential or M1 for 7 ÷ their 'bracket' (c)(i). M1 for 9n seen
4	indication that each box could weigh more than 50kg anything >50 but ≤ 50.5 stated or used	[1] [1] **[2]**	
5	**(a)** Tree diagram completed with correct probabilities **and** labels. **(b)** $\frac{42}{100}$ o.e	[2] [3] **[5]**	1 mark for correct probabilities without labels. allow SC1 for correct tree assuming no replacement M2 for $2\times\frac{7}{10}\times\frac{3}{10}$ oe **or** M1 for $\frac{7}{10}\times\frac{3}{10}$ oe seen allow f.t from tree diagram for M marks. SC2 for 58/100 oe
6	9	[2] **[2]**	1 for $\sqrt{3\times27}$, $\sqrt{81}$, or $3\sqrt{9}$. **or** $\sqrt{27} = 3\sqrt{3}$
7	**(i)** $y = \frac{1}{x}$ **(ii)** $y = 3 - x^3$	[1] [1] **[2]**	SC1 for 2 correct eqs. reversed.

Section A Total: 25