

END OF UNIT 5 QUESTIONS

- 1 a $1.6^9 = 68.7$ b $16.7^5 = 1\,300\,000$ c $1.065^9 = 1.76$
2 $\frac{4}{25}, \frac{7}{20}, \frac{3}{8}$
3 a $2x^2 + 3x - 5$ b $8 - 10x + 3x^2$
4 a $Q_1 = 55.3$ g, $Q_3 = 56.4$ g, $m = 55.9$ g, b IQR = 1.1 g
5 a $7n - 3, 697$ b $41 - 9n, -859$
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- 6 a 68% b $79 - 59 = 20$ c 31
7 16 m/s
8 a $(x - 10)(x + 8) = 0, x = 10$ or -8 b $(x - 12)(x + 2) = 0, x = 12$ or -2
9 56, 76
10 a Translation $\left(\frac{3}{2}\right)$ b Rotation about $(-1, 1), 90^\circ$
c Reflection in $y = -1$ d Enlargement: SF = 3
Centre = $(3, 4)$
11 9 12 15
13 a 6.5 b $8 - 6 = 2$
14 c Clockwise rotation of 90° about $(-1, 2)$
15 c Anticlockwise rotation of 90° about $(-1, 0)$
16 b 2^{n-1} or $\frac{2^n}{2}$ c 10 hurdles
17 g/p to 3 s.f.: 4.03, 4.04 and 3.95 so 300 g, 500 g and 400 g
18 a $(x - 1)(x - 3) = 0, x = 1$ or 3 b $(x + 3)(x + 2) = 0, x = -3$ or -2