



<u>Marks</u>

Show all working – Calculator <u>ONLY</u> required for Qu 2, 4 & 5.

1. Evaluate: $2\frac{3}{8} \times 2\frac{2}{5} - 5\frac{1}{2}$	(3)
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2. a)	Robert invests £12400 in a mid term savings account which pays interest at 2.3% per annum.	
	How much will he have in the account after 3 years?	(3)
b)	How many years in total will it take for Robert to reach £14000 in the account?	(1)

- **3**. Expand the following: $(2x 3)(3x^2 + 5x 4)$ (3)
- **4.** Solve: **a**) $3x^2 + 5x 4$ correct to 2 d.p. **(b**) $5x^2 13x 6 = 0$ **(6)**
- 5. The temperature is recorded in Glasgow over a 5 day period as follows:

18 21 19 15 14

a) Calculate the mean and standard deviation.

The temperature is also measured in Edinburgh and found to have a mean of 18.8 and a standard deviation of 3.2

- b) Write two statements to compare the two sets of data. (5)
- **6.** a) Express the following in the form, $y = (x a)^2 + b$: $y = x^2 8x 17$ (2)
 - b) State the equation of the axis of symmetry, (1)
 - c) State the coordinates of the turning point (1)

Total Marks: 25