

**Section A: Conversion Reasoning**

1. 0.72, $\frac{7}{10}$, 68%, 0.072
2. e.g. $\frac{2}{3}$ and 65%
3. Because dividing 1 by 3 gives a decimal that repeats forever (0.333...) and never ends exactly
4. 83.3%
5. 37.5%

Section B: Applying to Problems

1. No - the second 10% is worked out on the already-increased price, not the original, so the final price is £99, not £100, for a starting £100 item
2. 160 pupils ($400 - \frac{3}{5}$ of 400)
3. £60 (£42 is 70% of the original, so $£42 \div 0.7$)
4. 240g ($\frac{2}{5}$ of 800g is flour = 320g, remaining 480g split equally between sugar and butter = 240g each)
5. The £15-then-10%-off deal is better, by £3.50 ($20\% \text{ off } £100 = £80$; $£15 \text{ off then } 10\% \text{ off} = £85 \times 0.9 = £76.50$)