

Question 4 – 5:

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|-----------|---|---|---|
| 4(a) | 462 | 1 | |
| 4(b)(i) | $\frac{7}{15}$ oe | 1 | |
| 4(b)(ii) | $\frac{7}{15} \times \frac{6}{14} + \frac{6}{15} \times \frac{5}{14} + \frac{2}{15} \times \frac{1}{14}$ $= \frac{37}{105}$ | 3 | M2 for addition of two of $\frac{7}{15} \times \frac{6}{14} + \frac{6}{15} \times \frac{5}{14} + \frac{2}{15} \times \frac{1}{14}$ or M1 for one of the products seen |
| 4(b)(iii) | $\frac{29}{65}$ oe | 4 | M3 for $\frac{7}{15} \times \frac{6}{14} \times \frac{5}{13} + 3 \times \frac{7}{15} \times \frac{6}{14} \times \frac{6}{13} + 3 \times \frac{7}{15} \times \frac{6}{14} \times \frac{2}{13}$ oe or $1 - 3 \left(\frac{8}{15} \times \frac{7}{14} \times \frac{7}{13} \right) - \left(\frac{8}{15} \times \frac{7}{14} \times \frac{6}{13} \right)$ oe or M2 for the sum of at least two of $\frac{7}{15} \times \frac{6}{14} \times \frac{5}{13}, N \times \frac{7}{15} \times \frac{6}{14} \times \frac{6}{13}, N \times \frac{7}{15} \times \frac{6}{14} \times \frac{2}{13}$ seen or for $\frac{7}{15} \times \frac{6}{14} \times \frac{13}{13}$ or $\frac{7}{15} \times \frac{6}{14} + N \times \frac{7}{15} \times \frac{6}{14} \times \frac{k}{13}$ seen or M1 for $\frac{7}{15} \times \frac{6}{14} \times \frac{5}{13}$ or $N \times \frac{7}{15} \times \frac{6}{14} \times \frac{6}{13}$ or $N \times \frac{7}{15} \times \frac{6}{14} \times \frac{2}{13}$ seen If 0 scored SC1 for $\frac{1519}{3375}$ oe |