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|----|-----|---|--------------------------------------|---|
| 13 | (a) | $\frac{1}{12} + \frac{1}{4} + p + 3p = 1$ $p = \frac{1}{6}$ $(2,3) \ (3,2) \ (3,3)$ $\frac{1}{6} \times \frac{1}{2} + \frac{1}{2} \times \frac{1}{6} + \frac{1}{2} \times \frac{1}{2}$ $\frac{5}{12}$ | M1 A1 M1 | soi. Allow M1 for any two correct pairs and no incorrect pairs or for all three correct pairs and at most one incorrect pair All correct and added, ft their p . A1 [5] |
| 13 | (b) | $\frac{1}{2}(1 - 0.02)$ $= 0.49$ | M1 A1 [2] | |