

Year 12 Probability Worksheet – Answers

1 $1/13$ 2 $1/3$ 3 $1/11$ 4 $119/120$

5 Option II

6 The probability distribution of success is:

| | | | | | |
|--------------|--------------------|--------------------|--------------------|-------------------|------------------|
| X | 0 | 1 | 2 | 3 | 4 |
| P (X) | $\frac{625}{1296}$ | $\frac{500}{1296}$ | $\frac{150}{1296}$ | $\frac{20}{1296}$ | $\frac{1}{1296}$ |

7 $6/243$ 8 $11/50$

9 The probability distribution of the number of defective bulbs is

| | | | |
|--------------|------------------|-----------------|-----------------|
| X | 0 | 1 | 2 |
| P (X) | $\frac{49}{100}$ | $\frac{21}{50}$ | $\frac{9}{100}$ |

10 $1/52$