



## Extension 1 Probability Worksheet – Answers

1  $11/243$                       2 (iii)  $1024/1025$     3  $3!4!/6! = 1/5$     4  $1/10$

5  $10$                       6  $1-4q^4(1-q)^3$

7 The probability distribution is as follows:

<b>X</b>	0	1	2
<b>P (X)</b>	$\frac{49}{100}$	$\frac{21}{50}$	$\frac{9}{100}$

8  $1/52$                       9  $1/3, \frac{1}{2}$

10 The probability distribution is:

<b>X</b>	0	1	2	3	4
<b>P (X)</b>	$\frac{625}{1296}$	$\frac{500}{1296}$	$\frac{150}{1296}$	$\frac{20}{1296}$	$\frac{1}{1296}$

