bksb
Excellence in skills development

# Functional Skills Mathematics

## Level 2

## Answers 16
## Probability

west nottinghamshire college

HD2/L2.1

## Exercise 1

1) a) $\frac{1}{52}$

b) $\frac{1}{52}$

c) $\frac{4}{52} = \frac{1}{13}$

d) $\frac{12}{52} = \frac{3}{13}$

2) $\frac{2}{17}$

3) $\frac{8}{14} = \frac{4}{7}$

4) $\frac{6}{200} = \frac{3}{100}$

5) $\frac{4}{7}$

6) $\frac{6}{49}$

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## Exercise 2

1) $\frac{1}{8}$

2)

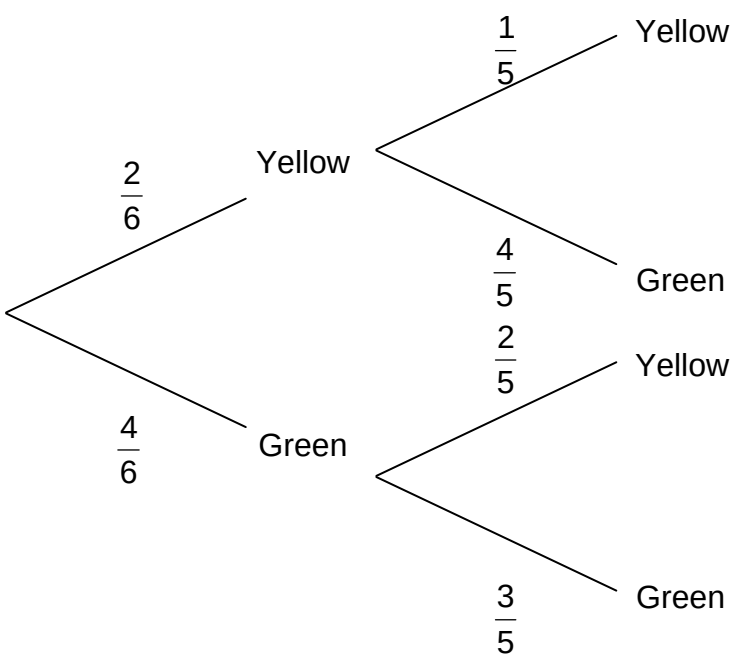
| | 1 | 2 | 3 | 4 | 5 | 6 |
|---|---|---|---|---|---|---|
| 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 2 | 3 | 4 | 5 | 6 | 7 | 8 |
| 3 | 4 | 5 | 6 | 7 | 8 | 9 |
| 4 | 5 | 6 | 7 | 8 | 9 | 10 |
| 5 | 6 | 7 | 8 | 9 | 10 | 11 |
| 6 | 7 | 8 | 9 | 10 | 11 | 12 |

3) a) $\frac{1}{36}$ b) $\frac{1}{12}$ c) $\frac{5}{36}$ d) $\frac{1}{36}$

4) $7 = \frac{1}{6}$

5) a)

**First pick** **Second pick**




YY = $\frac{2}{6} \times \frac{1}{5} = \frac{2}{30} = \frac{1}{15}$

YG $\frac{2}{6} \times \frac{4}{5} = \frac{8}{30} = \frac{4}{15}$

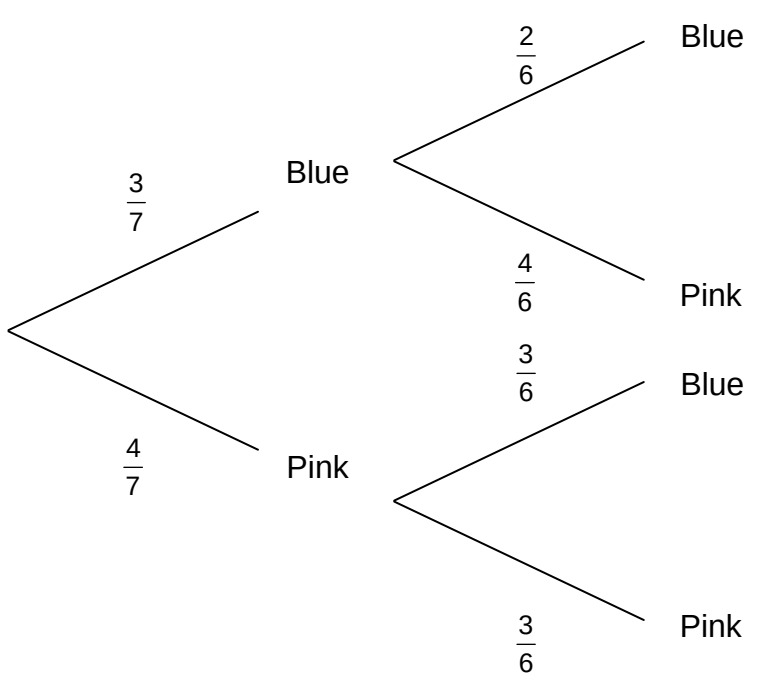
GY $\frac{5}{9} \times \frac{4}{8} = \frac{20}{72} = \frac{4}{15}$

GG = $\frac{4}{6} \times \frac{3}{5} = \frac{12}{30} = \frac{2}{5}$

**Exercise 2 continued**

5) b)

**First pick** **Second pick**




BB $\frac{3}{7} \times \frac{2}{6} = \frac{6}{42} = \frac{1}{7}$

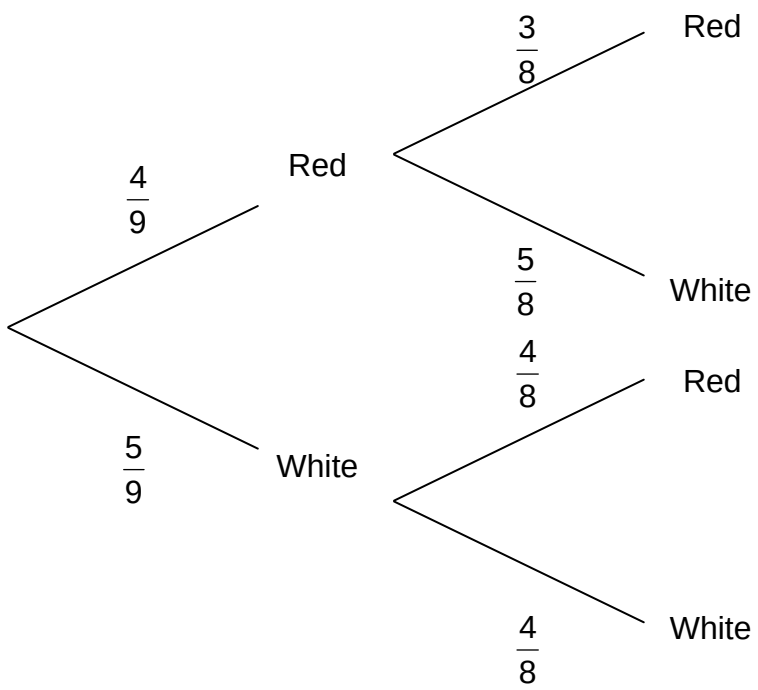
BP $\frac{3}{7} \times \frac{4}{6} = \frac{12}{42} = \frac{2}{7}$

PB $\frac{4}{7} \times \frac{3}{6} = \frac{12}{42} = \frac{2}{7}$

PP $\frac{4}{7} \times \frac{3}{6} = \frac{12}{42} = \frac{2}{7}$

5) c)

**First pick** **Second pick**




RR $\frac{4}{9} \times \frac{3}{8} = \frac{12}{72} = \frac{1}{6}$

RW $\frac{4}{9} \times \frac{5}{8} = \frac{20}{72} = \frac{5}{18}$

WR $\frac{5}{9} \times \frac{4}{8} = \frac{20}{72} = \frac{5}{18}$

WW $\frac{5}{9} \times \frac{4}{8} = \frac{20}{72} = \frac{5}{18}$

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