



- 1) a) 73 parts per 100 shaded  
 $= 73\% = \frac{73}{100} = 0.73$
- b) 4 parts per 100 shaded  
 $= 4\% = \frac{4}{100} = 0.04$

2) The decimal 0.6 is the odd one out because 0.6 is equivalent to 60%. The other amounts are all equivalent to 6%.

- 3) a) True.  
 b) False, 2% is not greater than 0.1.  
 c) True.

4)

Fraction	Fraction with a denominator of 100	Percentage	Decimal
$\frac{20}{50} =$	$\frac{40}{100}$	40%	0.4
$\frac{12}{50} =$	$\frac{24}{100}$	24%	0.24
$\frac{20}{200} =$	$\frac{10}{100}$	10%	0.1 or 0.10
$\frac{90}{200} =$	$\frac{45}{100}$	45%	0.45

- 1) a) Keeva is thinking of a percentage between 60%-80%.  
 b) Dilek is thinking of a percentage between 30%-35%.  
 c) Adam is thinking of a percentage between 4%-7%.



- 2) a) 0.02 should be 0.2  
 b)  $\frac{1}{100}$  should be  $\frac{10}{100}$   
 c) All amounts are equal in this statement.
- 3) a) Parminder is incorrect. As  $0.5 = 50\%$  there would need to be an amount between 50-60% coloured in for Parminder's statement to be accurate and there is actually 40% of the squares coloured in.  
 b) Alfie is incorrect. As  $0.06 = 6\%$  then  $6\% + 40\% = 46\%$  not 100%.  
 c) Robert is incorrect. The fraction of the 100 square coloured in is  $\frac{40}{100}$ , which is equivalent to  $\frac{80}{200}$ .

- 1) Saminda:  $\frac{136}{200} = \frac{68}{100} = 68\% = 0.68$   
 Emily:  $\frac{280}{400} = \frac{70}{100} = 70\% = 0.7$   
 Harry:  $\frac{180}{300} = \frac{60}{100} = 60\% = 0.6$



Emily has completed the greatest proportion of the journey. She has 0.3 of her journey remaining.

2) A variety of answers are possible. Example answers shown.

0.01-0.3	35%-55%	0.6-0.9
$\frac{20}{100} = 0.2$	$\frac{20}{50} = \frac{40}{100} = 40\%$	$\frac{160}{200} = \frac{80}{100} = 0.8$
$\frac{1}{100} = 0.01$	$\frac{45}{100} = 45\%$	$\frac{180}{300} = \frac{60}{100} = 0.6$
$\frac{5}{50} = \frac{10}{100} = 0.1$	$\frac{100}{200} = \frac{50}{100} = 50\%$	$\frac{280}{400} = \frac{70}{100} = 0.7$

3) Marie is wrong because the fraction simplifies to 0.98 and this is too large for the 0.6-0.9 column.