Fractions, Decimals and Percentages

1   Copy and fill in the table below.

Question Number	Fraction in its simplest form	Decimal	Percentage
Eg	$\dfrac{2}{5}$	0.4	40%
a		0.6	
b			75%
c	$\dfrac{7}{20}$		
d	$\dfrac{5}{8}$		
e		0.04	
f			7%
g		0.375	
h	$\dfrac{17}{25}$		

2   Put the following numbers into order.

a $\dfrac{3}{4}$,   0.7 ,   72% , $\dfrac{17}{20}$, 0.075

b $\dfrac{3}{7}$,   0.315 ,   315% , $\dfrac{7}{15}$, $\dfrac{9}{17}$

c $\dfrac{4}{15}$,   0.7% ,   7 , $\dfrac{16}{25}$, 0.07

d $\dfrac{7}{18}$,   0.45 ,   48% , $\dfrac{13}{40}$, 0.0552

3   Bill earned £400 per week. Catelyn earned £450 per week. David earned £600 per week.
     Bill managed to save 35% of his wage every week. Catelyn saved 30% of her wage each week. David saved 24% of his wage each week.
     How much did each of them save?

4   Joanne saved £70 per week from a wage of £420. She spent half of the remaining amount on her rent. Of the money she had left after rent and savings, she divided it amongst her shopping, energy bill and entertainment in the ratio 5:3:2.
     How much did she spend on each item?

5   Simon was looking at buying a new car. He was faced with three different offers.
     Offer A was to purchase a car for £24,000 with five years interest free credit.
     Offer B was to purchase a car for £19,500 but paying 6% compound interest on a loan over five years.
     Offer C was to purchase a car with a £8000 deposit and then pay a further £12,000 at 7% simple interest for five years.
     Which offer should Simon accept?

6   Beau scored $\frac{37}{40}$ in her maths test. Rowan scored 91% in his maths test. The ratio of the correct to incorrect questions that Nicola scored was 1:12. Rank the students in ascending order stating their individual scores.

7   In 2010, the ratio of boys to girls in a football club was 3:7. Now, the number of girls in the club has increased by 60% whilst the number of boys has decreased by 15%. In 2010, there were 50 players in the club altogether. How many girls are now in the club?

8   Billy paid for his crayons out of his pocket money. The crayons were £0.50 each. If he bought 10 or more crayons, he got 15% off the price. How many crayons would he have to buy to get 10 "free" crayons?

9   Frank Sinatra has sold 1.5×10^8 records. Bruce Springsteen has sold 17% fewer records. If the royalties for one of Sinatra's records was £1.45 and the royalties for one of Springsteen's records was £1.51, who is the richer of the two artists?

10   A square has sides 4 metres long. The lengths of each side of the square are increase by 25%. By what percentage has the area of the square increased?