Ratio

T2: Percent, Fraction, Ratio comparisons

1   Mary, Mungo and Midge lived in a house.

Each week, Mary spent $\frac{3}{4}$ of her money and saved the rest.

Mungo saved 45% of her money and saves the rest.

Midge spends and saves his money in the ratio 3:2.

Each person saves £300 per week.

How much does each person earn?

2   Alistair, Leah and Charlie lived in a house.

Each week, Alistair spent $\frac{2}{5}$ of his money and saved the rest.

Leah saved 35% of her money and saves the rest.

Charlie spends and saves his money in the ratio 5:4.

Each person spends £450 per week.

How much does each person earn?

3   Donna, Billy and Alicia run a taxi each.

    a   For a thirty mile journey, Donna charges £3.50 standing charge and the other 85% of the fare is dependant on the distance of journey. Express this as a ratio in the form 1:n the cost of the fare.

    b   For the same journey, Billy charges £2.50 for the standing charge and the other $\frac{11}{12}$ths of the cost is determined by the distance travelled. Express this in the form 1:n and determine the cost of the fare.

    c   The ratio of standing charge to distance travelled charge that Alicia charges is 18:35. Put this ratio in the form 1:n. If the standing charge is £6, what is the overall cost of the journey in Alicia's taxi?

    d   Which taxi would you recommend for the 30 mile trip?

4   A manufacturer distributes its products by lorry.

Trucks A, B and C are all identical in design and size.

The ratio of filled space to unfilled space on truck A is 7:9.

Sixty-eight percent of truck B is filled.

Truck C is $\frac{5}{8}$ full.

The maximum load of each lorry is 12000 kg.

How much is each truck carrying?