Maths problem solving questions

Problem Solving

1 A car park is full.

- $\frac{1}{3}$ of the cars leave

- 60% of the remaining cars are red.

There are 174 red cars.
How many cars left the car park?

2 Mo has some red and green sweets.

- He eats $\frac{1}{3}$ of the sweets.

- $\frac{3}{4}$ of the sweets left over are green.

- Mo buys himself 30 more green sweets.

There are now 162 green sweets.
How many sweets did Mo start with?

Problem Solving

3 Eva has £6.05 in a moneybox.

She only has 20p, 10p and 5p coins.

For every two 10p coins in the box, Eva has one 20p coin and three 5p coins.

How many of each coin does Eva have in her moneybox?

4 Dexter has to make the scales read between 250 g and 300 g.

He only has 10 g, 25 g and 50 g weights.

He has to use at least one of each weight.

For every three 10 g weights on the scales, Dexter uses one 25 g weight.

What combinations could he use?

1 A rectangle is cut into two pieces.

6 cm

The area of B is $\frac{2}{7}$ of the area of the rectangle.

The area of A is 36 cm² greater than the area of B.

What is the length of the rectangle?

2

The area of B is 40% of the area of the rectangle.

A is cut in half to make shape C and D.

The area of B is 8 cm² greater than the area of C and D.

What is the area of the whole rectangle?

3 Tommy is getting a taxi home.

The taxi company charges at the following rate.

Taxi Fares	
First 5 mins	£3.80
Next 5 mins	£3.10
Every following minute	40p

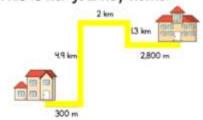The taxi leaves school at 3.47 p.m.

It arrives at Tommy's home at 16.04

How much does the fare cost?

4 Eva is getting a taxi home.

The taxi company charges at the following rate.

Taxi Fares	
First 3 km	£3.80
Next 5 km	£3.10
Every following km	40p

This is her journey home.

2 km
1.3 km
4.9 km
2,800 m
300 m

How much does the fare cost?