

Show all working – NO Calculator required.

<u>Marks</u>

1. Two lines have equations 2x + 3y = 12 and x + y = 5.

Find the point of intersection of the 2 lines.

(3)

2. Solve: 3a + 5b = 2

a = 3b + 10

(3)

3. Solve: 3p - 2q = 4

2p - 3q = 11

(3)

4. Mr. Martini is ordering tea and coffee for his cafe.

He spends exactly £108 on these each month.

In March he orders 4kg of tea and 6kg of coffee.

In April he changes his order to 8kg of tea and 3 kg of coffee.

How much do the tea and coffee cost each per kilogram?



5. An electrical goods warehouse charges a fixed price per item for goods delivered plus a fixed rate per mile.

The total cost to a customer 40 miles from the warehouse for the delivery of 5 items was £30.

A customer who lived 100 miles away paid £54 for the delivery of 2 items.

Find the cost to a customer who bought 3 items and lives 70 miles away.

