

Question 1 (4 Marks)

Solve the simultaneous equations

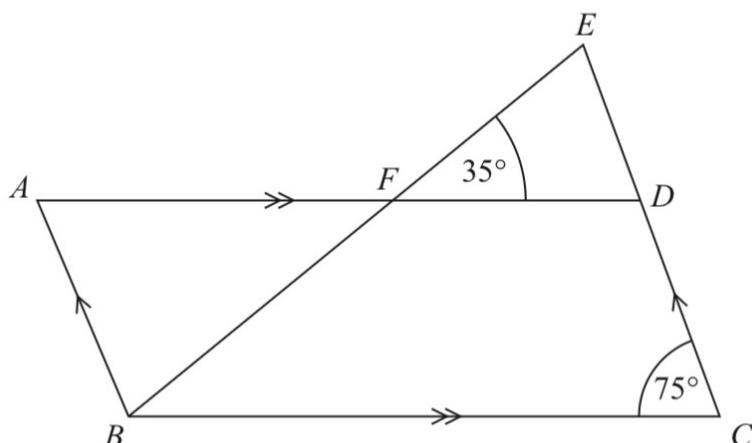
$$5x + 2y = 11$$

$$4x + 3y = 6$$

$x = \dots\dots\dots$

$y = \dots\dots\dots$

Question 2 (4 Marks)



$ABCD$ is a parallelogram.

EDC is a straight line.

F is the point on AD so that BFE is a straight line.

Angle $EFD = 35^\circ$

Angle $DCB = 75^\circ$

Show that angle $ABF = 70^\circ$

Give a reason for each stage of your working.

Question 3 (3 Marks)

4 red bricks have a mean weight of 5 kg.

5 blue bricks have a mean weight of 9 kg.

1 green brick has a weight of 6 kg.

Donna says,

“The mean weight of the 10 bricks is less than 7 kg.”

Is Donna correct?

You must show how you get your answer.

Question 4 (4 Marks)

Renee buys 5 kg of sweets to sell.
She pays £10 for the sweets.

Renee puts all the sweets into bags.
She puts 250 g of sweets into each bag.
She sells each bag of sweets for 65p.

Renee sells all the bags of sweets.

Work out her percentage profit.

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