Q1.

A bag contains counters that are red, blue, green or yellow.

	red	blue	green	yellow
Number of counters	9	$3x$	$x - 5$	$2x$

A counter is chosen at random.

The probability it is **red** is $\dfrac{9}{100}$

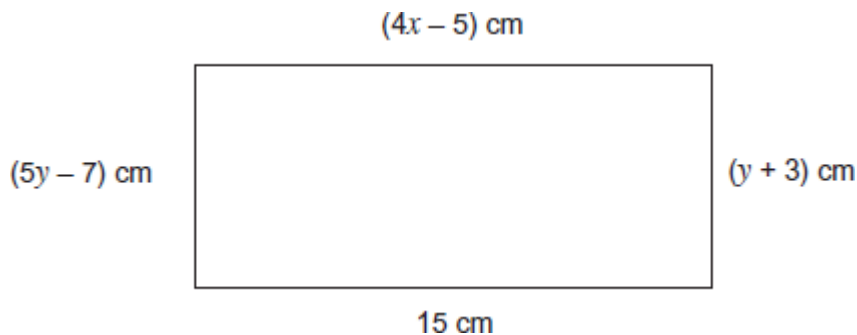Work out the probability it is green.

....

....

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....

Answer ....

(Total 4 marks)

Q2.

The diagram shows a rectangle.

Not drawn accurately

(4x – 5) cm

(5y – 7) cm   (y + 3) cm

15 cm

(a)   Set up and solve an equation to work out the value of x.

....

....

....

....

x = ...

(3)

(b)   Work out the area of the rectangle.

....

....

....

....

....

....

....

....

Answer .... cm^2

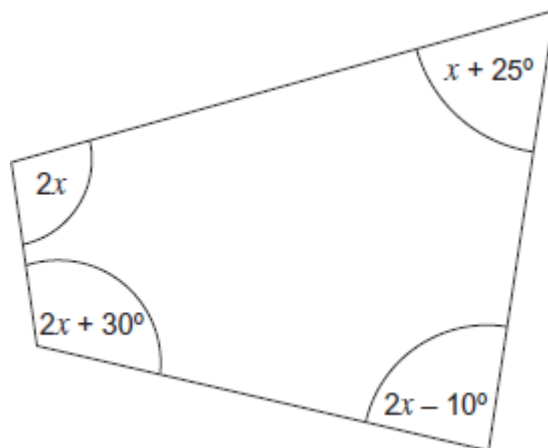**(5)**
(Total 8 marks)

Q3.
The diagram shows a quadrilateral.

Not drawn accurately

Work out the value of x.

....

....

....

....

....

....

Answer .... degrees

(Total 4 marks)

Q4.

In a quiz, players can choose to answer **easy** or **hard** questions.

x points are scored for an easy question.
10 **more** points are scored for a hard question.

(a)   Write the points scored for a **hard** question in terms of x.

Answer ....

(1)

(b)   A player correctly answers 3 easy questions and 2 hard questions.
She scores 95 points.

Use this information to write an equation in x.

....

Answer ....

(1)

(c)   Solve your equation to find the number of points scored for an **easy** question.

....

....

....

....

Answer ....

(3)
(Total 5 marks)

Q5.

```
┌─────────────────────────────────┐
│          Flags-4-U              │
│                                 │
│      Paving slabs £ 4 each      │
│               +                 │
│         Delivery £ 20           │
└─────────────────────────────────┘
```

(a) Write down a formula for the cost, £C, of buying x paving slabs and having them delivered.

....

C = ...

(2)

(b)

```
┌─────────────────────────────────┐
│          Stones-R-Us            │
│                                 │
│     Paving slabs £ 2.50 each    │
│               +                 │
│         Delivery £ 35           │
└─────────────────────────────────┘
```

James wants to buy some paving slabs and have them delivered.
The total cost is the same from both companies.

How many paving slabs does he want to buy?

....

....

....

....

....

....

Answer ....

(3)
(Total 5 marks)