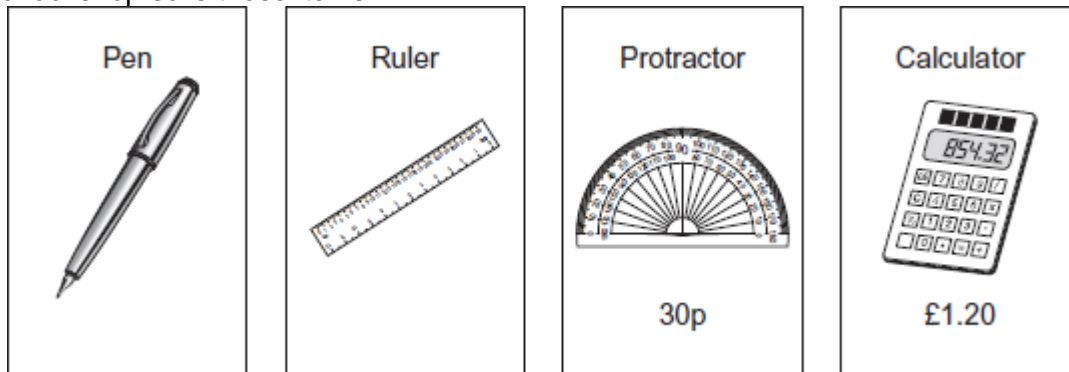


**Q1.**

A school shop sells these items.



- (a) Write an expression for the cost of  $y$  protractors and  $w$  calculators.  
Give your answer in pence.

Answer ..... pence

**(2)**

- (b) Two pens and one ruler cost £2.65  
One pen and five rulers cost £2

Work out the cost of one pen and the cost of one ruler.

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Cost of one pen £ .....

Cost of one ruler £ .....

**(4)**  
**(Total 6 marks)**

**Q2.**

Solve the simultaneous equations

$$2x - 3y = 24$$

$$6x + 2y = -5$$

Do **not** use trial and improvement.  
 You **must** show your working.

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Answer .....

**(Total 3 marks)**

**Q3.**

3 fence panels and 4 posts cost £82.97  
 5 fence panels and 6 posts cost £131.95

Rav builds fences.

He says,

“£200 should be enough for 8 panels and 9 posts”

Is he correct?  
 You **must** show your working.

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$x = \dots\dots\dots, y = \dots\dots\dots$

(Total 5 marks)

**Q5.** Solve the simultaneous equations.

$$2x + 3y = 10$$

$$4x - y = -1$$

Do **not** use trial and improvement.  
You **must** show your working.

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Answer .....

(Total 3 marks)

**Q6.** Solve the simultaneous equations.

$$2x + 3y = 53$$

$$3x - y = 19$$

Do **not** use trial and improvement.  
You **must** show your working.

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$x = \dots\dots\dots, y = \dots\dots\dots$

**(Total 4 marks)**

**Q7.**

(a) Solve the simultaneous equations

$$2x + 6y = 16$$

$$3x + 8y = 19$$

Do **not** use trial and improvement.  
 You **must** show your working.

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Answer .....

**(4)**

(b) Write down two simultaneous equations whose only solution is

$$x = 6, y = -5$$

Answer .....

and

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**(2)**

**(Total 6 marks)**

**Q8.**

3 kg of apples and 1.5 kg of blackberries cost £ 9.00

2 kg of apples and 4 kg of blackberries cost £ 13.20

Work out the cost of 1 kg of apples and the cost of 1 kg of blackberries.

You **must** show your working.

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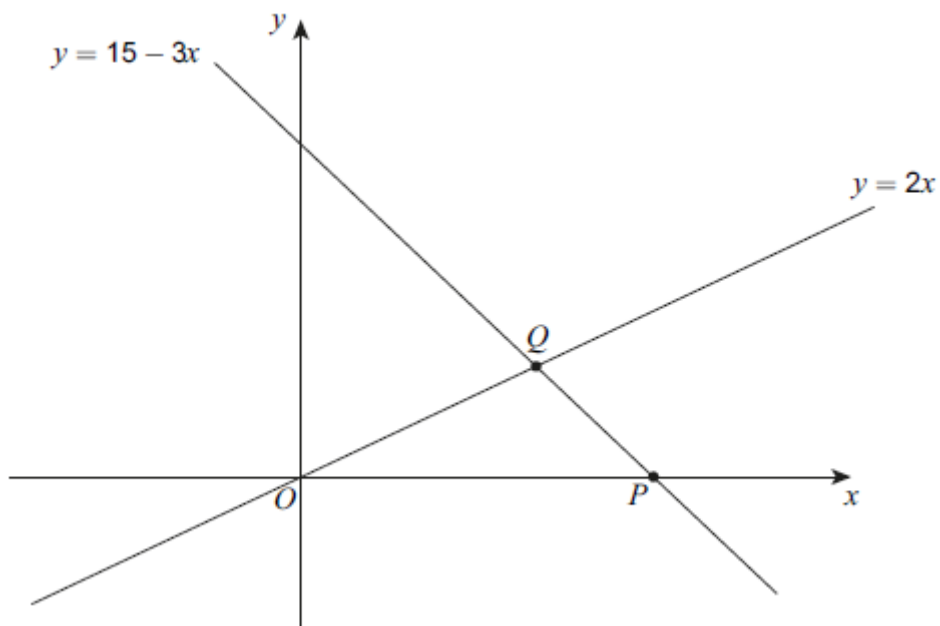
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1 kg of apples     £ .....

1 kg of blackberries     £ .....

**(Total 5 marks)****Q9.**

The sketch graphs of two straight lines are shown.



(a) Work out the coordinates of  $P$ .

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Answer (..... , .....) (1)

(b) Work out the coordinates of  $Q$ .

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Answer (..... , .....) (3)

(c) Use your answers to parts (a) and (b) to work out the area of triangle  $OPQ$ .

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Answer..... (2)

(Total 6 marks)

**Q10.** Solve the simultaneous equations

$$2x - 3y = 7$$

$$3x + 4y = 2$$

You **must** show your working.

Do **not** use trial and improvement.

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Answer .....

**(Total 4 marks)**

**Q11.** Solve the simultaneous equations

$$5x - 4y = 24$$

$$x + 2y = 9$$

You **must** show your working.

Do **not** use trial and improvement.

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Answer  $x = \dots\dots\dots$ ,  $y = \dots\dots\dots$

**(Total 3 marks)**