AQA - Solving equations and inequalities – GCSE Mathematics Paper-2

- 1. May/2020/Paper_2F/No.5
 - (a) Solve 7x = 56

[1 mark]

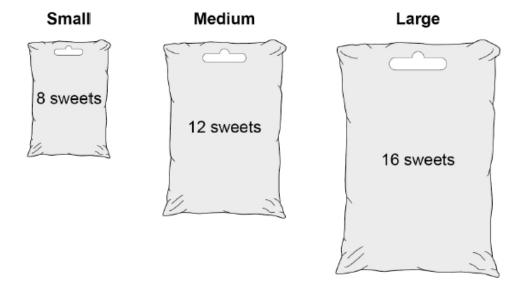
$$\chi =$$

(b) Solve 25 - y = 18

[1 mark]

2. May/2020/Paper_2F/No.21

Jill puts 440 sweets into small bags, medium bags and large bags.



\sim	he		
С.	_	110	\sim

30 small bags

twice as many medium bags as large bags.

There are no sweets left over.

For the number of bags, work out the ratio	small : medium : large	[4 marks]
Answer :	:	

3. May/2020/Paper_2H/No.29

Solve
$$\frac{5}{4x+1} = \frac{2x}{x^2+1}$$

Give your solutions to 3 significant figures.

Answer

You must show your working.

Tou must snow your working.	[5 marks

4.	June/2019/Paper_	_2F/No.24
- •		,

x is an integer.

$$-4 < x ≤ 2$$

and

$$2 \le x + 3 < 9$$

Work out all the possible values of x.

TYON Out all the possible values of a.	[3 marks]

5. June/2019/Paper_2H/No.1

Circle the point that lies on the curve $y = x^2 - 4x + 1$

[1 mark]

- (-1, 4)
- (-1, -4)
- (-1, -2)
- (-1, 6)

6. June/2019/Paper_2H/No.10

 \boldsymbol{x} is an integer.

$$-4 < x ≤ 2$$

and

$$2 \le x + 3 < 9$$

Work out all the possible values of \boldsymbol{x} .

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Answer

7.	June/2019/Paper_2H/No.14 Ali and Mel are making 3-digit codes.	
	The digit 0 is not used.	
	Ali only uses odd digits.	
	Mel only uses even digits.	
(a)	Ali can make <i>x</i> more codes than Mel.	
	Assume that digits cannot be repeated.	
	Work out the value of x .	
		[3 marks]
	Answer	_
(b)	In fact, digits can be repeated.	
	What does this tell you about the actual value of x ?	
	Tick one box.	[1 mark]
		[many
	It is bigger than my answer to part (a)	
	It is smaller than my answer to part (a)	
	It is the same as my answer to part (a)	

- **8.** Nov/2019/Paper_2F/No.7
 - (a) Solve x + 17 = 12

[1 mark]

 $\chi =$

(b) Solve $\frac{w}{4} = 12$

[1 mark]

w =

(c) Simplify fully $\frac{9m}{12m}$

[2 marks]

Answer ____

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Here is an identity.

$$a(3x-10) \equiv 21x+2b$$

Work out the values of a and b.

[3	marks]	
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10. Nov/2019/Paper_2H/No.24

Here are two inequalities.

$$-2 \le x \le 3$$

$$9 \le x + y \le 11$$

 \boldsymbol{x} and \boldsymbol{y} are integers.

Work out the **greatest** possible value of y-x

[3 marks]

Answer _____