INEQUALITIES

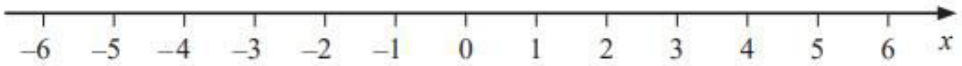
Pearson Edexcel - Thursday 6 June 2019 - Paper 2 (Calculator) Foundation Tier

1.

20 (a) Solve $14n > 11n + 6$

(2)

(b) On the number line below, show the set of values of x for which $-2 < x + 3 \leqslant 4$



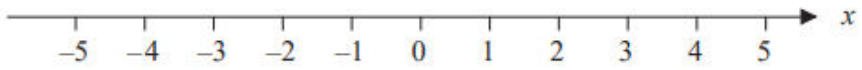
(3)

(Total for Question 20 is 5 marks)

Pearson Edexcel - Monday 12 November 2018 - Paper 3 (Calculator) Foundation Tier

2.

19 (a) On the number line, show the inequality $x < 4$



(2)

$3 < y \leqslant 7$ where y is an integer.

(b) Write down all the possible values of y.

.....

(2)

(c) Solve $3x + 5 \geqslant x + 17$

.....

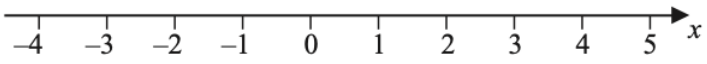
(3)

(Total for Question 19 is 7 marks)

Pearson Edexcel – Specimen 2 - Paper 3 (Calculator) Foundation Tier

3.

20 (a) Show the inequality $-2 \leqslant x < 3$ on the number line below.



(2)

(b) Solve the inequality $4y + 7 < 16$

.....

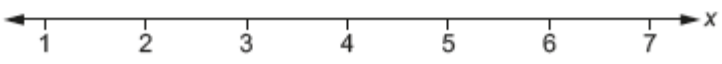
(2)

(Total for Question 20 is 4 marks)

OCR November 09 November 2020- Morning (Calculator) Foundation Tier

4.

16 Solve $3x + 4 < 19$.
Show your solution on the number line.

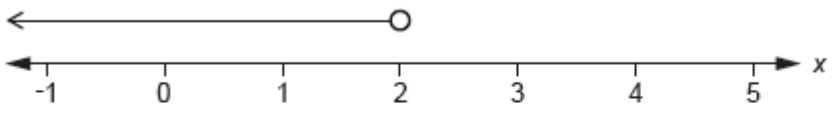


[4]

OCR Tuesday 5 November 2019 – Morning (Calculator) Foundation Tier

5.

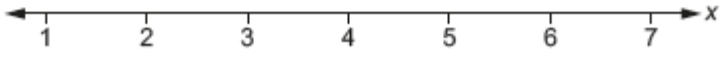
6 Write down the inequality shown on this number line.



..... **[2]**

6.

16 Solve $3x + 4 < 19$.
Show your solution on the number line.

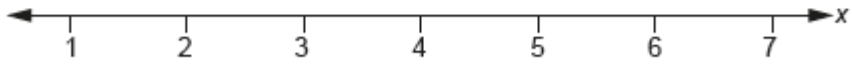


[4]

OCR Monday 11 November 2019 – Afternoon (Calculator) Foundation Tier

7.

19 Solve $3x - 5 \geqslant 10$.
Show your solution on the number line.

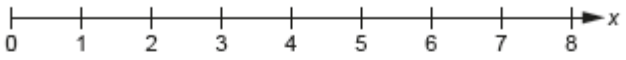


[4]

OCR Monday 12 November 2018 – Morning (Calculator) Foundation Tier

8.

7 **(a)** Show the inequality $x > 3$ on this number line.



[2]

(b) Simplify.

$4a + 3c + 7a - 5c$

(b) ..... **[2]**

(c) Solve.

$\frac{2x}{3} = 4$

(c) $x =$ ..... **[2]**

OCR Thursday 7 June 2018 – Morning (Non-Calculator) Foundation Tier

9.

12 **(a)** Multiply out.

$$4c(d-5)$$

(a) ..... **[2]**

(b) Multiply out and simplify.

$$(3x+2)(x-4)$$

(b) ..... **[2]**

(c) Solve.

$$3x-2 \leqslant 22$$

(c) ..... **[2]**

OCR Thursday 2 November 2017– Morning (Calculator) Foundation Tier

10.

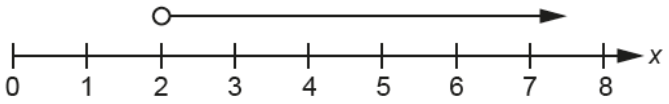
4 **(a)** Use one of these symbols <, > or = to make each statement true.

(i) $\frac{1}{4}$ ..... 0.25 **[1]**

(ii) 0.66 ..... $\frac{2}{3}$ **[1]**

(iii) 6 ..... 2^3 **[1]**

(b) Write down the inequality for x that is shown on this number line.



(b) ..... **[1]**

OCR Sample Question Paper 3 – Morning/Afternoon (Calculator) Foundation Tier

11.

18 **(a)** **(i)** Solve.

$5x + 1 > x + 13$

(a)(i) ..... **[3]**

(ii) Write down the largest integer that satisfies $5x - 1 < 10$.

(ii) ..... **[1]**

(b) Solve.

$3x^2 = 75$

(b) $x =$ ..... **[2]**

(c) Solve.

$4x + 3y = 5$
$2x + 3y = 1$

(c) $x =$ .....

$y =$ .....

[3]

AQA Thursday 6 June 2019 – Morning (Calculator) Foundation Tier

12.

24 x is an integer.

$$-4 < x \leqslant 2$$

and

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

Work out all the possible values of x.

[3 marks]

Answer _____

AQA Tuesday 6 November 2018 – Morning (Non-Calculator) Foundation Tier

13.

10 x is a positive integer.

$35 \div x$ is a positive integer.

Work out the **four** possible values of x.

[2 marks]

Answer _____ _____ _____ _____

AQA Monday 12 November 2018 – Morning (Calculator) Foundation Tier

14.

28 Solve $8 > 3 - \frac{1}{2}x$

[2 marks]

Answer _____

AQA Thursday 24 May 2018 – Morning (Non-Calculator) Foundation Tier

15.

28 Solve $5(x + 3) < 60$

[2 marks]

Answer _____

AQA Thursday 2 November 2017 – Morning (Non-Calculator) Foundation Tier

16.

31 (a) Factorise $x^2 - 100$

[1 mark]

Answer _____

31 (b) Solve $7x + 6 > 1 + 2x$

[2 marks]

Answer _____

AQA Wednesday 8 November 2017 – Morning (Calculator) Foundation Tier

17.

18 x is greater than 5 **and** less than or equal to 9

Circle the inequality that shows this.

[1 mark]

$5 \leqslant x < 9$ $5 > x \geqslant 9$ $5 \leqslant x > 9$ $5 < x \leqslant 9$

AQA Tuesday 13 June 2017 Morning– Morning (Calculator) Foundation Tier

18.

27 How are the whole number solutions to A and B different?

A Solve $3 \leqslant 3x < 18$

B Solve $3 < 3x \leqslant 18$

[2 marks]

AQA Sample Paper 1– Morning (Non-Calculator) Foundation Tier

19.

26 Solve $5x - 2 > 3x + 11$

[2 marks]

Answer _____