

A17...Inequalities on a Numberline

OCR

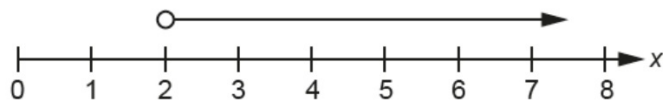
4 (a) Use one of these symbols $<$, $>$ or $=$ to make each statement true.

(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]

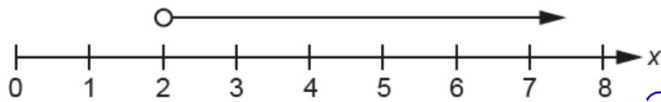
4 (a) Use one of these symbols $<$, $>$ or $=$ to make each statement true.

(i) $\frac{1}{4} \dots = \dots 0.25$ [1]

(ii) $0.66 \dots < \dots \frac{2}{3}$ [1]
 $\frac{2}{3} = 0.6666$ is bigger than 0.66

(iii) $6 \dots < \dots 2^3$ [1]
 $\rightarrow 8$

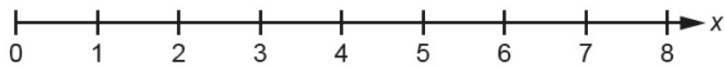
(b) Write down the inequality for x that is shown on this number line.



(b) $x > 2$ [1]

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

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[2]

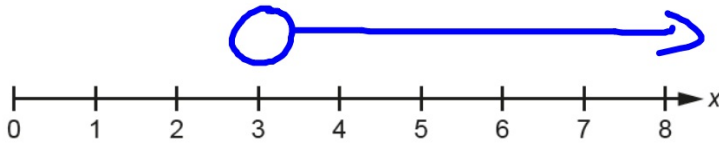
(b) Simplify.

A2 $4a + 3c + 7a - 5c$

(b) [2]

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

A17



[2]

(b) Simplify.

A2 $4a + 3c + 7a - 5c$

$$4a + 7a = 11a$$

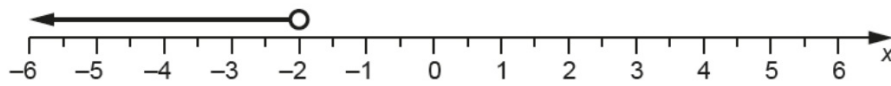
$$3c - 5c = -2c$$

(b) $11a - 2c$ [2]

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2 Gemma's solution to the inequality $3x + 1 > -5$ is shown on the number line.

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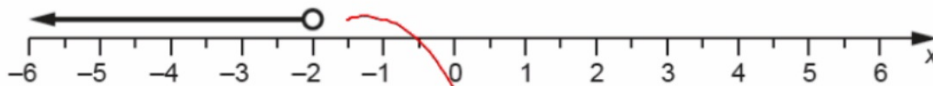


Is Gemma's solution correct?
Explain your reasoning.

..... [3]

2 Gemma's solution to the inequality $3x + 1 > -5$ is shown on the number line.

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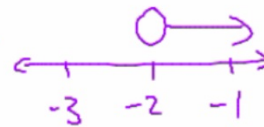


Is Gemma's solution correct?
Explain your reasoning.

$$\begin{aligned} 3x + 1 &> -5 \\ 3x &> -6 \\ x &> -2 \end{aligned}$$

should show

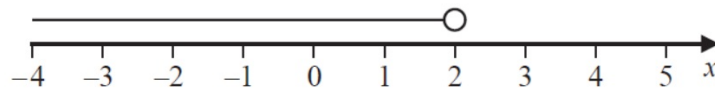
$$x > -2$$



Edexcel

20 Write down the inequality shown in the diagram.

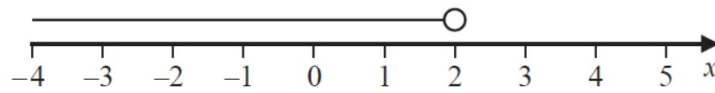
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.....
(Total for Question 20 is 2 marks)

20 Write down the inequality shown in the diagram.

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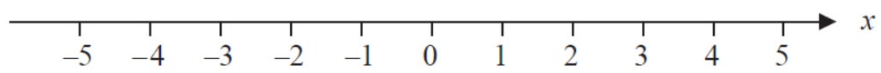


$$x < 2$$

(Total for Question is 2 marks)

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

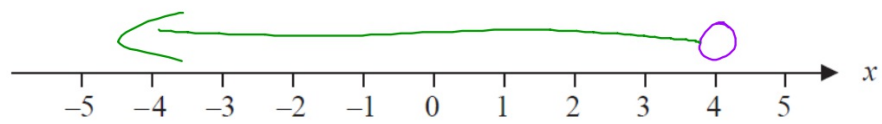
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(2)

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

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(2)

AQA

4 Circle the correct statement.

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[1 mark]

$$-4 < -3$$

$$1 \leq -2$$

$$-6 > 5$$

$$-1 \geq 0$$

4 Circle the correct statement.

A17

[1 mark]

$$-4 < -3$$

$$1 \leq -2$$

X

$$-6 > 5$$

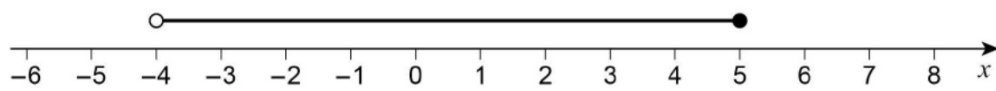
X

$$-1 \geq 0$$

X

1 Circle the inequality shown by the diagram.

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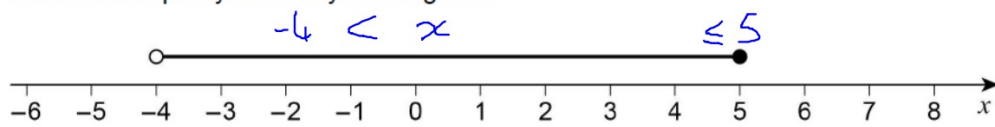


[1 mark]

- $-4 \leq x < 5$ $-4 \leq x \leq 5$ $-4 < x < 5$ $-4 < x \leq 5$

1 Circle the inequality shown by the diagram.

A17



[1 mark]

$-4 \leq x < 5$

$-4 \leq x \leq 5$

$-4 < x < 5$

$-4 < x \leq 5$