Year 9 Class 5 questions

Q1

Solve the equation to find z.

$$10(z+1) = 5(z-3)$$

$z =$ ☐

Q2

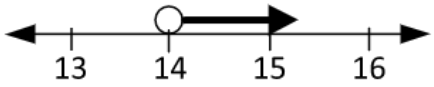
Solve the equation to find x.

$$7(3x-5) - 18x = 25$$

$x =$ ☐

Q3

Choose the correct inequality for the graph.



- ○ $x < -14$
- ○ $x > 15$
- ○ $x > 16$
- ○ $x > 14$

Q4

Solve the equation to find x.

$$2(5x+6) = 8(x-5)$$

$x =$ ☐

Q5

Solve the equation to find a.

$$12(a-5) = 3(5a+2)$$

$a =$ ☐

Q6

Solve the equation to find x.

$$x + 5(x-4) = 16$$

$x =$ ☐

Q7

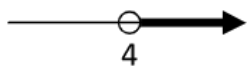
Solve the equation to find x.

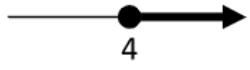
$$5x - 7(2-x) = 34$$

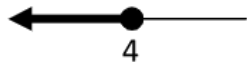
$x =$ ☐

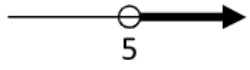
Q8

Solve and graph $5x > 20$.

- ○ $x > 4$ 

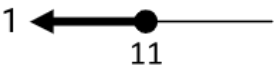
- ○ $x > 4$ 

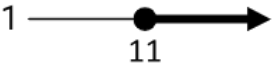
- ○ $x > 4$ 

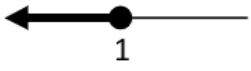
- ○ $x < 5$ 

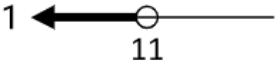
Q9

Solve and graph $x - 6 \leq 5$.

- ○ $x \leq 11$ 

- ○ $x \geq 11$ 

- ○ $x \leq 1$ 

- ○ $x \leq 11$ 

Q10

Solve the equation to find a.

$$5(a-3) = 2(6+a)$$

$a =$ ☐

Q11

Solve the equation to find b.

$$6(b-2) = 5(9+b)$$

$b =$ ☐

Q12

Solve the equation to find y.

$$12(7-y) = 8(y-1)$$

$y =$ ☐

Q13

Solve the equation to find y.

$$2(3y+5)-2(4y-5) = 0$$

$y =$ ☐

Q14

Solve the equation to find a.

$$2(3a-8)-2(2a+7) = 0$$

$a =$ ☐

Q15

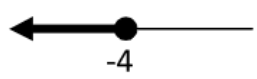
Solve the equation to find x.

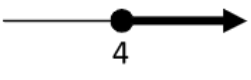
$$3(2x-5)-5(4+x) = 0$$

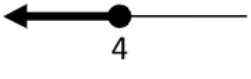
$x =$ ☐

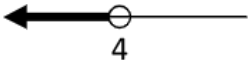
Q16

Solve and graph $-2x \geq -8$.

- ○ $x \leq -4$ 

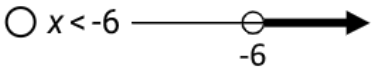
- ○ $x \geq 4$ 

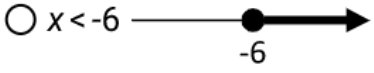
- ○ $x \leq 4$ 

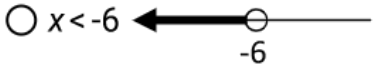
- ○ $x \leq 4$ 

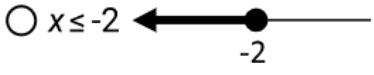
Q17

Solve and graph $\frac{x}{3} < -2$.

- ○ $x < -6$ 

- ○ $x < -6$ 

- ○ $x < -6$ 

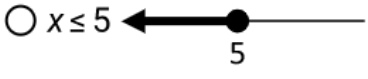
- ○ $x \leq -2$ 

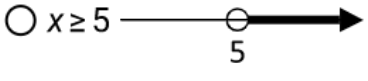
Q18

Solve and graph $\frac{x}{5} \geq 1$.

- ○ $x \geq 5$ 

- ○ $x \geq -5$ 

- ○ $x \leq 5$ 

- ○ $x \geq 5$ 

Q19

Solve the equation to find a.

$$2(3a-8) = 2(2a+7)$$

$a =$ ☐

Q20

Solve the equation to find z.

$$9(8-z) = 5(7-2z)$$

$z =$ ☐

Q21

Solve the equation to find z.

$$3(7-3z) = 2(10-5z)$$

$z =$ ☐

Q22

Solve the equation to find a.

$3(10-4a) = 2(4-7a)$

$a =$ ☐

Q23

Solve the equation to find c.

$3(2c-5)+7 = 2(4c-3)$

$c =$ ☐

Q24

Solve the equation to find y.

$9(y-8) = 3(4y+1)+3$

$y =$ ☐

Q25

Solve the equation to find y.

$3(3y-8) = 5(7-y)-3$

$y =$ ☐

Q26

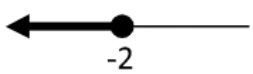
Solve the equation to find y.

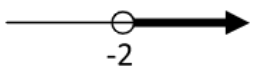
$8(3y-2) = 3(10-y)+35$

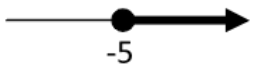
$y =$ ☐

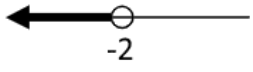
Q27

Solve and graph $-5x > 10$.

- ○ $x < -2$ 

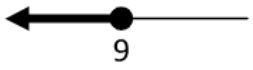
- ○ $x < -2$ 

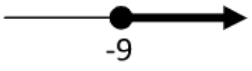
- ○ $x > -5$ 

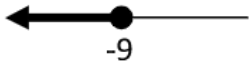
- ○ $x < -2$ 

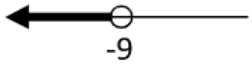
Q28

Solve and graph $-\frac{x}{3} \geq 3$.

- ○ $x \leq 9$ 

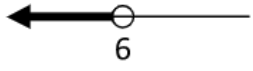
- ○ $x \geq -9$ 

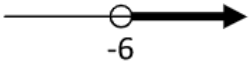
- ○ $x \leq -9$ 

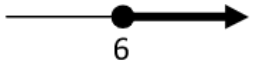
- ○ $x \leq -9$ 

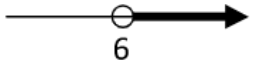
Q29

Solve and graph $-\frac{1}{3}x < -2$.

- ○ $x < 6$ 

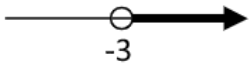
- ○ $x > -6$ 

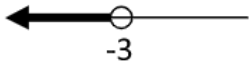
- ○ $x > 6$ 

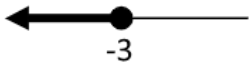
- ○ $x > 6$ 

Q30

Solve and graph $1 > -\frac{1}{3}x$.

- ○ $x > -3$ 

- ○ $x > -3$ 

- ○ $x > -3$ 

- ○ $x > -1$