Year 9 Class 5 questions

Q1

Solve the equation to find z.

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

$z =$ ☐ −5

Q2

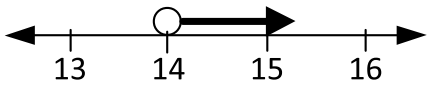
Solve the equation to find x.

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

$x =$ ☐ 20

Q3

Choose the correct inequality for the graph.



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

Q4

Solve the equation to find x.

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

$x =$ ☐ −26

Q5

Solve the equation to find a.

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

$a =$ ☐ −22

Q6

Solve the equation to find x.

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

$x =$ ☐ 6

Q7

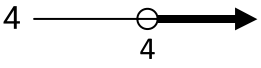
Solve the equation to find x.

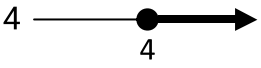
$5x-7(2-x) = 34$

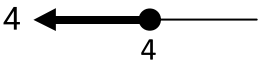
$x =$ ☐ 4

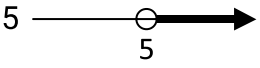
Q8

Solve and graph $5x > 20$.

- → ○ $x > 4$ 

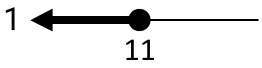
- ○ $x > 4$ 

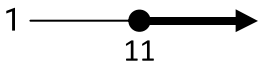
- ○ $x > 4$ 

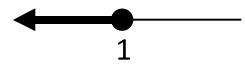
- ○ $x < 5$ 

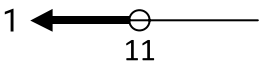
Q9

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.

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

$a =$ ☐ 9

Q11

Solve the equation to find b.

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

$b =$ ☐ 57

Q12

Solve the equation to find y.

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

$y =$ ☐ 4.6

Q13

Solve the equation to find y.

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

$y =$ ☐ 10

Q14

Solve the equation to find a.

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

$a =$ ☐ 15

Q15

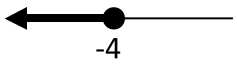
Solve the equation to find x.

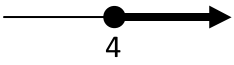
$3(2x-5)-5(4+x) = 0$

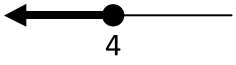
$x =$ ☐ 35

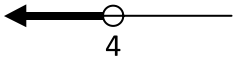
Q16

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

- ○ $x \leq -4$ 

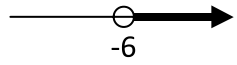
- ○ $x \geq 4$ 

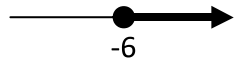
- → ○ $x \leq 4$ 

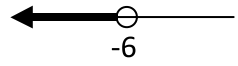
- ○ $x \leq 4$ 

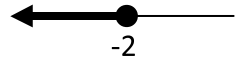
Q17

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

- ○ $x < -6$ 

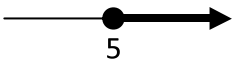
- ○ $x < -6$ 

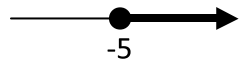
- → ○ $x < -6$ 

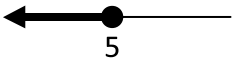
- ○ $x \leq -2$ 

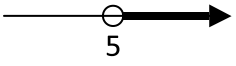
Q18

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.

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

$a =$ ☐ 15

Q20

Solve the equation to find z.

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

$z =$ [ ] −37

Q21

Solve the equation to find z.

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

$z =$ [ ] −1

Q22

Solve the equation to find a.

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

$a =$ [ ] −11

Q23

Solve the equation to find c.

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

$c =$ [ ] −1

Q24

Solve the equation to find y.

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

$y =$ [ ] −26

Q25

Solve the equation to find y.

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

$y =$ [ ] 4

Q26

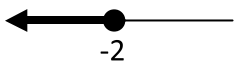
Solve the equation to find y.

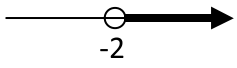
$8(3y-2) = 3(10-y)+35$

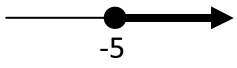
$y =$ [ ] 3

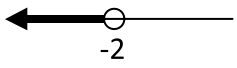
Q27

Solve and graph $-5x > 10$.

- ○ $x < -2$ 

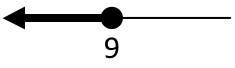
- ○ $x < -2$ 

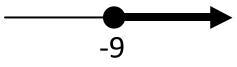
- ○ $x > -5$ 

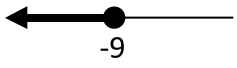
- → ○ $x < -2$ 

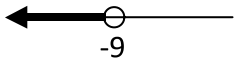
Q28

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

- ○ $x \leq 9$ 

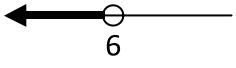
- ○ $x \geq -9$ 

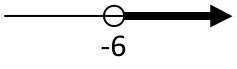
- → ○ $x \leq -9$ 

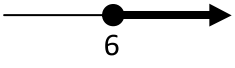
- ○ $x \leq -9$ 

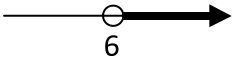
Q29

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

- ○ $x < 6$ 

- ○ $x > -6$ 

- ○ $x > 6$ 

- → ○ $x > 6$ 

Q30

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