

Mat101 Quiz-1

10 Questions

1. Solve the equation $5x+15=2x+6$

4/42 ☐ A 3

37/42 ☒ B -3

1/42 ☐ C 7

0/42 ☐ D -7

2. The direction of the inequality is reversed when it is multiplied or divide by negative number

39/42 ☒ A True

3/42 ☐ B False

3. To which equation the solution steps belong? "Cross-multiply, subtract $2x$ from both sides , divide both side by 2"

0/42 ☐ A $(x-2)/3=1$

10/42 ☐ B $(x+1)/2=6$

17/42 ☒ C $(2x+3)/4=x$

15/42 ☐ D $(2x+1)/2=4x$

4. Solve the equation $(2x+1)/2=x$ for x

4/41 ☐ A 0

8/41 ☐ B 1

3/41 ☐ C -1

26/41 ☒ D no solution

5. Find the value of $-3x+2y+x^2-y^2$ when $x=2$, $y=-2$

12/41 ☐ A -2

2/41 ☐ B -4

1/41 ☐ C -8

26/41 ☒ D -10

6. Please simplify the inequality $-4+4<2x-11$

40/40



E.

$-1+1<2x-11$:4 simplify by 4
 $0 < x-11$:2

Zerinay Gelen

$-4+4$ (minus four plus four

Elif06

For values of X less than 6, the sign changes
When we move x to order side of the equation we verify it

E07

take -11 to the left side of the equation. the sign changes. I need to simplify.
answer is $11/2 > x$

Nur

$x > 11/2$

Alar

Zero is less than $2x$ minus 11. Add 11 both sides and the new equation is 11 is less than $2x$. Then divide both sides 2 because x's coefficient is 2. The solution is 11 divided by 2 is less than x.

Elif

Simplify the left side $-4+4=0$
The inequality becomes $0 < 2x-11$
Isolate the term with x by adding 11 to both sides $0+11 < 2x-11+11$
Isolate x by dividing both sides by 2
solution is $x > 5.5$

M.

$11/2 < x$
 $x > 5.5$

MA

left side is 0, so the right side has to be greater than 0. because of -11, $2x$ has to be minimum 6.
answer is $x = 6$

Arda Günaştı / K / Tarık

$x > 5.5$

Hy

$x = 1/2$

Elif / NB / Nesibe Akyasan / ai / dö / s

$11/2 < x$

Berke Güzelgöl / Engin Çetin / Kaan Kusdemir

$11 < 2x$

Susu

$-4+4 < 2x-11$
 $-2x < 4-4-11$

$$-2x < -12$$

$$-x < 4$$

E..

$$1-) 0 < 2x - 11$$

$$2-) 2 / (2x - 11)$$

$$3-) x - 11/2$$

$$4-) 11/2 < x$$

$$5-) 5.5 < x$$

N

$$x > 11/2 > 5.5$$

1) simply the left side

add 11 to both sides

divide both side by 2

$$x > 11/2$$

$$x > 11/2$$

$$x >$$

bk

$$0 < 2x - 11$$

$$11 < 2x$$

$$11/2 < x$$

zero less than two x mines eleven

eleven less than two x

eleven divided two less than x

Baran / Pocikerim sentarcı

.

Yağız

$$x > 11/2$$

Helin

$$-4 + 4 < 2x - 11$$

$$-4 + 4 = 11$$

$$0 < 2x - 11$$

$$11 < 2x$$

$$11/2 < x$$

$$x > 11/2$$

$$x > 5.5$$

Ayşenur

x=12 olursa eşitsizlik basitleşir

Brn

$$x > 11/2$$

Mete / X

$$x > 11/2$$

K

$$x = 6$$

Nur

$$0 < 2x - 11$$

$$+11 < 2x$$

$$= 2x/11$$

P

$$x > 5$$

Yağız White

$$11 < 2x$$

$$11/2 < x$$

y.

idk

G

$$-4 + 4 < 2x - 11$$

$$2x = 11$$

$$x = 11/2$$

7. Which of the following order is correct when performing on any given equation?

6/40 **A** Brackets-Multiplication/ Division-Indices-Addition/ Subtraction

29/40 **B** Brackets-Indices-Multiplication/Division-Addition/Subtraction

2/40 **C** Multiplication/Division-Indices-Brackets-Addition/Subtraction

3/40 **D** Multiplication/Division-Brackets-Indices-Addition/Subtraction

8. To which equation do the solution steps belong? "cross-multiply, subtract 1 from both sides, divide both side by 3"

1/40 **A** $(-3x+2)/2=4$

14/40 **B** $(-x+1)/3=2$

5/40 **C** $(x+3)/2+3$

20/40 **D** $(3x+1)/2=1$

9. To which equation steps do we need to solve the equation $(x-3)^2 = 16$ for x?

6/40 **A** divide both side by 2, add 3 on both sides

0/40 **B** square both side, add 3 to both sides

31/40 **C** take square root of both sides, add 3 to both sides

3/40 **D** add 3 to both sides, take square root of both sides

10. Please simplify the equation $2x-6=(x+3)/2$ for x, write down the solution for each step



E07

39/39

both sides are equal. I need to simplify. answer is 3

Baran / Berke Güzelgöl / Elif06 / Kaan Kusdemir / P / Pocikerim sentarcı

.

Alar

cross multiply. then $4x$ minus 12 is equal x plus 3 collect similar terms and $3x$ is equal to fifteen x is 5

Zerinay Gelen

□□ ?

Elif

Cross multiplied
multiply out the brackets 2 $(2x-6)x2$
 $4x-12=x+3$
 $3x=15$
 $x=5$

Arda Günaştı / K / Mete / Nur / Tarık

$x=5$

dö

1)cross multiply
2) $4x-12=x+3$ move $4x$ other side and 3 from the other side
3)divide both sides by 3
 $x=5$

Nesibe Akyasan

$2(2x-6)=x+3$
 $4x-12=x+3$
 $x=5$

MA

i put x to the left side, and the -6 to the right side and we have
 $x= -3/2$

Elif

Eliminate the fraction by multiplying both sides by 2.
Get all x terms on one side. Subtract x from both sides.
Get all constant terms on the other side. Add 12 to both sides.
Solve for x by dividing both sides by 3.
solution $x=5$

E..

1-)cross-multiply the equation= $4x-12=x+3$
2-)lets move x to other side and -12 to other side= $3x=15$
3-) $3x=15/3$
4-) $x=5$

Susu

$2(2x-6)=x+3$
 $4x-12=x+3$

$$4x - x = 3 + 12$$

$$3x = 15$$

$$x = 5$$

N

multiply both sides by 2
 subtract x from both sides
 add to 12 both sides
 divided both sides by three
 solution $x = 5$

Brn

$$2x - 6 = \frac{x + 3}{2}$$

Step 1: Multiply both sides by 2 to eliminate the denominator:

$$2(2x - 6) = x + 3$$

$$4x - 12 = x + 3$$

Step 2: Subtract x from both sides:

$$4x - x - 12 = 3$$

$$3x - 12 = 3$$

Step 3: Add 12 to both sides:

$$3x = 15$$

Step 4: Divide both sides by 3:

$$x = 5$$

Final Answer:

$$\boxed{5}$$

Hy

$$x = 0$$

X

multiply both sides by 2 move x to the left add 12 to both sides divide by 3
 $x = 5$

s

$$2x - 6 = (x + 3)/2$$

$$4x - 12 = x + 3$$

$$3x = 15$$

$$x = 5$$

M.

$$x-3 = x + 3 = 0$$

Ayşenur

$$\text{cross multp } 4x-12=x+3$$

$$5x=15 \quad x=-3$$

Helin

$$2x(2x-6)=2x(x+3/$$

$$2$$

$$4x-12=x+3$$

$$(4x-x)-12=(x-x)+3$$

$$3x-12=13$$

$$3x/3=15/3$$

$$x=15$$

$$x=5$$

bk

$$2(2x-6)=x+3$$

$$4x-12 = x+3$$

$$3x=15$$

$$x=5$$

Nur

$$2x-6=x+3/2=2(2x-6)=x+3=4x-12=x+3=3x=15$$

$$x=5$$

y.

idk

Yağız

$$2(2x-6)=x+3. \quad 4x-12=3. \quad \text{step 2 } 4x-x-12=3. \quad 3x-12=3. \quad \text{step 3 } 3x=15. \\ \text{step 4 } X=5$$

Engin Çetin

$$4x-12=x+3$$

$$3x=15$$

$$x=5$$

K

divide both three

NB

cross multiply it makes $4x-12=x+3$

subtract x and add 12 to both sides it makes $3x=15$

$$x=5$$

Yağız White

cross multiply simplify x

G

$$2x-6=x-3/2$$

$$3x=9/2$$

$$x=3/2$$

ai

$$(2x-6)*2=x+3$$

$$4x-12=x+3$$

take to 12 other side

$$4x=x+15$$

take to x other side

$$3x=15$$

divides both side by 3

$$x=5$$