

0113

1. What is the value of the expression below when $x = -4$?
 $(x+1)(x+2)$

$$(-4+1)(-4+2)$$

(6)

	-4+1	
		-4
		+2

2. If we could change x to equal something else, could $(x+1)(x+2)$ ever be a negative number? Explain.

Yes. If x is negative, the answer will be too.

3. Solve this equation for x . Show your steps.

$$5x - 6 = 4x + 3$$

$$\begin{array}{r} -3 \\ \hline 5x - 9 = 4x \end{array}$$

$$\begin{array}{r} -4x \\ \hline -9 = -8x \end{array}$$

$$\begin{array}{r} \cdot 8 \\ \hline -9 = -8x \end{array}$$

$$-9 = -8x \quad -11.25 = x$$

4. Describe two ways you could check your answer to the previous question.

One way to check my answer:

Plug in a number to x .

Another way to check my answer:

create a table or graph.

15. If $3x + 4y = 14$ and $y = -\frac{5}{2}x$, what is the value of x ?

$x =$ Between
 -5 & -6

16. What does the answer to the previous problem tell you about the graphs of the two equations?

They are parallel

0126

1. What is the value of the expression below when $x = -4$?
 $(x+1)(x+2)$

$$(-4+1)(-4+2)$$

$$(-3)(-2) \quad \boxed{6}$$

2. If we could change x to equal something else, could $(x+1)(x+2)$ ever be a negative number? Explain.

$$(-10+1)(-10+2)$$

$$(-9)(-8) \quad \text{No}$$

3. Solve this equation for x . Show your steps.

$$5x - 6 = 4x + 3$$

$$\begin{array}{r} -4x \\ \hline -9x - 6 = 3 \end{array}$$

$$\begin{array}{r} +6 \\ \hline -9x = 9 \end{array}$$

$$\begin{array}{r} \div -9 \\ \hline x = -1 \end{array}$$

4. Describe two ways you could check your answer to the previous question.

One way to check my answer:

put -1 in for x

Another way to check my answer:

redo your work

15. If $3x + 4y = 14$ and $y = -\frac{5}{2}x$, what is the value of x ?

$$3x + 4\left(-\frac{5}{2}x\right) = 14$$

$$3x - 10x = 14$$

$$-7x = 14$$

$$\begin{array}{r} \div -7 \\ \hline x = -2 \end{array}$$

$$\boxed{x = -2}$$

16. What does the answer to the previous problem tell you about the graphs of the two equations?

they will meet

0335

1. What is the value of the expression below when
- $x = -4$
- ?

$$\begin{aligned} &(x+1)(x+2) \\ &(-4+1)(-4+2) \\ &(-3)(-2) \end{aligned}$$

6

2. If we could change
- x
- to equal something else, could
- $(x+1)(x+2)$
- ever be a negative number? Explain.

No, because the result would either be two negatives, two positives, or a number times 0, so it couldn't be negative.

3. Solve this equation for
- x
- . Show your steps.

$$\begin{aligned} 5x - 6 &= 4x + 3 \\ -4x & \quad +6 \\ \hline -x &= 9 \end{aligned}$$

4. Describe
- two ways
- you could check your answer to the previous question.

One way to check my answer:to plug 9 into x as the equation, and see if it worksAnother way to check my answer:

to kind of guess-check and see if it would look like it would make sense

15. If
- $3x + 4y = 14$
- and
- $y = -\frac{5}{2}x$
- , what is the value of
- x
- ?

$$x = -8$$

16. What does the answer to the previous problem tell you about the graphs of the two equations?

The graph or point would be negative and $x > y$.

0435

1. What is the value of the expression below when
- $x = -4$
- ?

$$(x+1)(x+2)$$

$$\begin{aligned} &(-4+1)(-4+2) \\ &(-3)(-2) = \boxed{6} \end{aligned}$$

2. If we could change
- x
- to equal something else, could
- $(x+1)(x+2)$
- ever be a negative number? Explain.

Yes, if only if x was changed again to a negative ~~##~~

3. Solve this equation for
- x
- . Show your steps.

$$\begin{aligned} 5x - 6 &= 4x + 3 \\ 5x - 6 &= 4x + 3 \\ -4x & \quad -6 \\ \hline x - 6 &= 3 \\ +6 & \quad +6 \\ \hline x &= 9 \end{aligned}$$

4. Describe
- two ways
- you could check your answer to the previous question.

One way to check my answer:plug $x=9$ into the x places in the problemAnother way to check my answer:

Do the problem a different way & see if you get the same answer

15. If
- $3x + 4y = 14$
- and
- $y = -\frac{5}{2}x$
- , what is the value of
- x
- ?

$$3x + 4(-2.5) = 14$$

$$3x + 10 = 14$$

$$-10 \quad -10$$

$$3x = 4$$

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

$$x = \frac{4}{3} = 1\frac{1}{3} = 1.\bar{3}$$

16. What does the answer to the previous problem tell you about the graphs of the two equations?

That they are on graphs

0606

1. What is the value of the expression below when $x = -4$?
 $(x+1)(x+2)$

$$-16 - 12 + 2$$

$$\begin{array}{r} (-4+1)(-4+2) \\ \underline{-4} \\ -8 \end{array}$$

2. If we could change x to equal something else, could $(x+1)(x+2)$ ever be a negative number? Explain.
 yes because there would only be 1 negative and that would make the answer - (you would put a -# in for x)

3. Solve this equation for x . Show your steps.

$$5x - 6 = 4x + 3$$

$$\begin{array}{r} 5x - 6 = 4x + 3 \\ -4x + 6 \quad -4x + 6 \\ \hline x = 9 \end{array}$$

4. Describe two ways you could check your answer to the previous question.

One way to check my answer: plug x in to the equation

Another way to check my answer: you could solve it and put 9 in for x

15. If $3x + 4y = 14$ and $y = -\frac{5}{2}x$, what is the value of x ?

$$\begin{array}{l} 14 \\ \hline 3x + 4y = 14 - 4y \\ 3x + 4(-\frac{5}{2}x) = 14 \\ 3x - 10x = 14 \\ -7x = 14 \\ \frac{-7x}{-7} = \frac{14}{-7} \\ x = -2 \end{array}$$

16. What does the answer to the previous problem tell you about the graphs of the two equations?

one is a negative graph and one is a positive one

0630

1. What is the value of the expression below when $x = -4$?
 $(x+1)(x+2)$

$$\begin{array}{r} (-4+1)(-4+2) \\ 16 - 8 - 4 + 2 \end{array}$$

6

2. If we could change x to equal something else, could $(x+1)(x+2)$ ever be a negative number? Explain.

no even if you put in a very high, or very low number for x , it would be positive answer.

3. Solve this equation for x . Show your steps.

$$5x - 6 = 4x + 3$$

$$x = 9$$

4. Describe two ways you could check your answer to the previous question.

One way to check my answer:

you can put what you think x is in the original problem & see if it's right.

Another way to check my answer:

you could go back & recheck your steps.

15. If $3x + 4y = 14$ and $y = -\frac{5}{2}x$, what is the value of x ?

$$\begin{array}{r} 3x + 4(-\frac{5}{2}x) = 14 \\ 3x - 10x = 14 \\ -7x = 14 \\ \frac{-7x}{-7} = \frac{14}{-7} \end{array}$$

$$x = -2$$

16. What does the answer to the previous problem tell you about the graphs of the two equations?

This shows that the line will be negative.

0789

1. What is the value of the expression below when
- $x = -4$
- ?

$(x+1)(x+2)$

$-3 \quad -2 \quad 6$

2. If we could change
- x
- to equal something else, could
- $(x+1)(x+2)$
- ever be a negative number? Explain. No, because you would have to use
- -1
- and that would change
- $(x+1)=0$
- and anything times zero equals zero.

3. Solve this equation for
- x
- . Show your steps.

$$\begin{array}{r} 5x - 6 = 4x + 3 \\ -4x + 6 = -4x + 6 \end{array}$$

$$\begin{array}{r} 5x \\ x = 9 \end{array}$$

4. Describe two ways you could check your answer to the previous question.

One way to check my answer: I should put 9 into the x position

Another way to check my answer: I should re do the problem

15. If
- $3x + 4y = 14$
- and
- $y = -\frac{5}{2}x$
- , what is the value of
- x
- ?

$x = -2$

16. What does the answer to the previous problem tell you about the graphs of the two equations? In less

they are parallel they will always intersect.

1547

1. What is the value of the expression below when
- $x = -4$
- ?

$(x+1)(x+2)$

$(-4+1)(-4+2)$

$(-3)(-2)$

6

2. If we could change
- x
- to equal something else, could
- $(x+1)(x+2)$
- ever be a negative number? Explain.

Yes. If $x = -1.7$, it would be negative

3. Solve this equation for
- x
- . Show your steps.

$$\begin{array}{r} 5x - 6 = 4x + 3 \\ +6 \quad +6 \\ \hline 5x = 4x + 9 \\ -4x \quad -4x \\ \hline x = 9 \end{array}$$

4. Describe two ways you could check your answer to the previous question.

One way to check my answer:

put 9 in for x

Another way to check my answer:

work backwards.

15. If
- $3x + 4y = 14$
- and
- $y = -\frac{5}{2}x$
- , what is the value of
- x
- ?

$3x + 4(-\frac{5}{2}x) = 14$

$3x - 10 = 14$

$3x = 24$

$\frac{3x}{3} = \frac{24}{3}$

$x = 8$

16. What does the answer to the previous problem tell you about the graphs of the two equations?

They have the same x .