

Distribute Equations #2 Math 9

Name: Key

Solve the following to complete the cheesy joke below (these ALL work out to integer answers)

$$3(5x - 4) = 8x + 2$$

$$x = 2$$

$$5x + 4(3x - 8) = 4 + 13x$$

$$x = 9$$

$$2(10 - 6x) = x - 8x$$

$$x = 4$$

$$2x + 18 = 12 - 6(x + 7)$$

$$x = -6$$

$$x - (5 - 3x) = 7x + 4$$

$$x = -3$$

$$-1x - (13 + 4x) = -3(5 - 9x) + 2$$

$$x = 0$$

$$8(x - 5) = 2(3x - 8)$$

$$x = 12$$

$$-4(3 - 6x) = 9(2x - 2)$$

$$x = -1$$

$$7(10 - 3x) = 5(15 - 4x)$$

$$x = -5$$

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

$$x = 16$$

$$2(9x - 1) = 99 - 7(3 - 4x)$$

$$x = -8$$

$$6(5x - 8) - 20 = 11(2x - 3) + 3x$$

$$x = 7$$

WHAT IS THE ADVANTAGE OF BUYING A MAGNETIC BULLETIN BOARD?

QU	IT	HA	I	NG	SA	IS	ST	IC	AC	AN	D	OC	KS	FR	OM	S	<del>CO</del>	EE	RK
4	-2	-5	-11	12	7	2	13	0	-18	-1	-6	16	25	50	-3	-8	<del>-15</del>	11	9

2) Now the following questions should be answered as a reduced fraction

a)  $9(3x - 2) = 11(2x + 4)$

$$x = \frac{62}{5}$$

b)  $10(3 - 8x) = -12(2x + 5)$

$$x = \frac{45}{28}$$

c)  $-3(6x + 1) + 11 = 5(3x + 7)$

$$x = \frac{-9}{11}$$

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

$$x = \frac{-11}{7}$$

e)  $3(2x + 1) - 2(x + 3) = 2(3x + 7)$

$$x = \frac{-17}{2}$$

f)  $5(4x + 9) + 12 = -2(3 - 7x)$

$$x = \frac{-21}{2}$$

g)  $-4(2x - 3) - (3x - 31) = 2(4x + 17)$

$$x = \frac{9}{19}$$

h)  $6(2x - 7) - 18x = -4 - (5x - 10) - 2x$

$$x = 48$$

Extend your skills and strive for excellence! .....up for a challenge??

1) Solve:  $8(3x - 1) + 12x - 5(7 - 3x) + 12(5x - 11) + 12 = -3(5x + 6) - 19 - (12 - 7x) + 13x - 5(2x + 19) - 7$

$$x = \frac{3}{29}$$

2) A number plus 4 is multiplied by 6 and then 12 is added. This results in the number minus 13 tripled. Find the number

$$x = -25$$