C, S, M

Hwk:

$$\frac{(5C+5S)+(2M+4S)+(10C+M)+(4+3S+M)}{4}$$

$5C+10C+C=16C$

$5S+4S+3S=12S$

$2M+M+M=4M$

$16C+12S+4M$

4

$4C+3S+M$

$4(4.50)+3(3)+(5)$

$18+9+5=32$

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

$1 \cdot 12$ 3 $3(4x+1)$

$2 \cdot 6$

$3 \cdot 4$

$3(4x)=12x$

$3(4x+1)$

$12x+3$

5a) DISTRIBUTIVE

b) DISTRIBITIVE

c) COMMUTATIVE

d) ASSOCIATIVE

e) DISTRIBUTIVE

Bell Ringer:

what value of x would make the following linear equation true?

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

$4(1)+3(4(1)+7=4(7(1)+3)-3$

Will $4 + 12(1)+21=28(1)+12-3$

$4+12+21=28+12-3$

$37 = 37$

What about this equation:

2(x + 1) = 2x - 3.

What value of x makes this equation true?

$2x+2=2x+3$

$+3 \quad\quad -3$

$2x+5=2x$

$-2x \quad\quad -2x$

$0=5$ NO solution

Transform the equation if necessary, and then solve to find the value of x that makes the equation true.

$17 + 5(2x - 9) = -(-6x + 10) + 4$

$17 - 10x + 45 = 6x - 10 + 4$

$-10x + (17 + 45) = 6x + (-10 + 4)$

$-10x + 62 = 6x - 6$

$+10x \quad +6 \quad +10x$

$\frac{16x}{16} = \frac{68}{16} - \frac{64}{16} + \frac{4}{16}$

$x = 4\frac{1}{4}$

$x - (9x - 10) + 11 = 12x + 3\left(-2x + \frac{1}{3}\right)$

$(x - 9x) + (10 + 11) =$

$-8x + 21 = (12x - 6x) + 1$

$-6x \quad -21 \quad 6x + 1 - 21$

$-6x$

$\frac{-14x}{-14} = \frac{20}{-14}$

$x = \frac{20}{14} = 1\frac{6}{14} = 1\frac{3}{7}$

$\frac{14}{14} + \frac{6}{14}$

$11(x+10)=132$

$11x+110=132$

$-110 \quad -110$

$\frac{11x}{11}=\frac{22}{11}$

$x=2$

$3(2x-14)+x=15-(-9x-5)$

$6x-42+x=15+9x+5$

$7x-42=9x+20$

$-7x \quad -20 \quad -7x \quad -20$

$\frac{-62}{2}=\frac{2x}{2}$ $\quad X=-31$

$8(2x+9)=56$

$16x+72=56$

$-72 \quad -72$

$\frac{16x}{16}=\frac{-16}{16}$

$x=-1$

Sort the following equations. Place them in groups based on the number of solutions for each problem.

0 1 INFINITE

What can we see in an equation that will tell us about the solution to the equation?

$3x + 4 = 8x - 9$	$6x + 5 = 8 + 6x$	$10x - 4 = -4 + 10x$
$-4x - 5 = 6 - 11x$	$12 - 15x = -2 - 15x$	$-2x + 5 = -2x + 5$
$9 + \frac{1}{2}x = 5x - 1$	$\frac{5}{4}x - 1 = 1 + \frac{5}{4}x$	$7 + 9x = 9x + 7$
$ax+b=cx+d$	$x+a=x+b$	$x+a=x+a$