Solving for Variables Review 6/29

Solve for x.

1) 6x + 9 = x + 6 2) 6 - 4x = -4x +9 3) -2x + 2/3 = -x + 4x/3

x=-⅗ 6 = 9 x = 2/3

NO SOLUTION

4) -5/3 + 3x/5 = -1/5 - 2x 5) -5x = 2 - 3(x - 2) 6) 4x - (x - 1) = 2(x + 3)

X = 22/39 x = -4 x = 5

7) Bob’s daily pill subscription costs $1.25 per pill. Joe’s daily pill subscription costs $1.50 per pill, but she received her first 2 pill free. Write an equation that can be used to find the number of days which Bob and Joe will have paid the same amount.

1.25x + 0 = 1.50 + 2

Directions: Solve for the indicated variable:

8) S = 180n - 360 for n 9) x/5 - g = a for x 10) y = 3x + 3b for b

B = y-3x/3

N = s+ 360/180 x=5a+5g

11) y = mx + b for x 12) v2 = u2 + 2as for s 13) PV = nRT for T

X = y-b/m s = v- u /a T=PV - nR

14) The formula S = (HWFT)/35,000 gives the approximate size in kilobytes (Kb) of a compressed video. The variables H and W represent the height and width of the frame measured in pixels, F is the number of frames per second (fps) the video plays, and T is the time the video plays in seconds. Estimate the time a move trailer will play if it has a frame height of 320 pixels, has a frame width of 144 pixels, plays at 15 fps, and has a size of 2360 Kb.

-T \* - = (320\*320\*144\*15-2360/35,000)\* -

T = 221183999.933