

## Math 70 Quiz #6 Answers

1.  No, since  $\frac{1}{2}(-1) + \frac{1}{3} = -\frac{3}{6} + \frac{2}{6} = -\frac{1}{6}$ , which is not  $\frac{1}{6}$ .
2. (a)   $x = 7$  (Add 10 to both sides of the equation to isolate  $x$ .)  
(b)   $t = -0.5$  (Subtract 2 from both sides of the equation to isolate  $t$ .)  
(c)   $w = 33$  (Multiply both sides by 3 (or divide by  $\frac{1}{3}$ ) to isolate  $w$ .)  
(d)   $x = \frac{1}{2}$  or 0.5 (Simplify the equation to  $10x = 5$ , then divide both sides by 10 and simplify to isolate  $x$ .)  
(e)   $y = -3$

You can isolate the variable  $y$  in two ways:

1) If you choose to subtract  $3y$  from both sides and add 8 to both sides, your equation should simplify to  $15 = -5y$ . Dividing both sides by  $-5$  gives you  $-3 = y$ .

2) If you choose to add  $2y$  to both sides and subtract 7 from both sides, your equation should simplify to  $5y = -15$ . Dividing both sides by 5 gives you  $y = -3$ .