

# B2 Solving Three Step Equations

Note Title

22/05/2015

SOLVE = SAMDEB

multiplies to Brackets

CHECK = BEDMAS

$$\begin{aligned} a) \quad 4(x+1) &= -24 \\ \div 4 & \\ x+1 &= -6 \\ -1 & \\ \boxed{x = -7} \end{aligned}$$

$$\begin{aligned} b) \quad 2(m-6) &= 8 \\ \div 2 & \\ m-6 &= 4 \\ +6 & \\ \boxed{m = 10} \end{aligned}$$

$$\begin{aligned} c) \quad -70 &= 5(r-9) \\ \div 5 & \\ -14 &= r-9 \\ +9 & \\ \boxed{-5 = r} \end{aligned}$$

$$\begin{aligned} d) \quad -2(3x-8) &= -8 \\ \div -2 & \\ 3x-8 &= 4 \\ +8 & \\ 3x &= 12 \\ \div 3 & \\ \boxed{x = 4} \end{aligned}$$

Solve and Check:

$$\begin{aligned} a) \quad 6(2n-3) &= -78 \\ \div 6 & \\ 2n-3 &= -13 \\ +3 & \\ 2n &= -10 \\ \div 2 & \\ \boxed{n = -5} \end{aligned}$$

DO something.	stays.
$6(2n-3) = -78$	
$6(2(-5)-3)$	
$6(-10-3)$	
$6(-13)$	
$-78$	$= -78 \checkmark$

$$\begin{aligned} b) \quad -4(7y+5) &= 36 \\ \div -4 & \\ 7y+5 &= -9 \\ -5 & \\ 7y &= -14 \\ \div 7 & \\ \boxed{y = -2} \end{aligned}$$

$-4(7y+5) = 36$	
$-4(7(-2)+5)$	
$-4(-14+5)$	
$-4(-9)$	
$36$	$= 36 \checkmark$

3. You bought movie tickets for yourself and 3 friends. You had coupons that saved \$2.50 per ticket. You spent \$39. Use an equation to find the original cost of one ticket.

$$4(\text{tickets}) = 39$$

$$\cancel{4}(T - 2.50) = 39$$

$$T - 2.50 = 9.75$$

$$+ 2.50 \quad + 2.50$$

$$T = 12.25$$

Tickets  
cost \$12.25