



**A.**  $6(1 + 2n) = -18$

*Handwritten notes: Blue arrows point from the 6 to 1 and 2n. Above the equation,  $12n + 6 = -18$  is written in blue.*

**B.**  $-(3r - 6) = -4$

*Handwritten notes: Red arrows point from the minus sign to 3r and 6. Above the equation,  $-3r + 6 = -4$  is written in red.*

$6 + 12n = -18$  ←

$\boxed{6-6} + 12n = -18-6$

$\frac{12n}{12} = \frac{-24}{12}$

$n = -2$

$-3r + 6 = -4$

$-3r \boxed{+6-6} = -4-6$

$\frac{-3r}{-3} = \frac{-10}{-3}$

$r = 3\frac{1}{3}$

$3.\bar{3}$

$$c) \quad \frac{4x}{5} + 2 = 14$$

$$\frac{4x}{5} + \boxed{2-2} = 14-2$$

$$\cancel{5} \frac{4x}{\cancel{5}} = 12^{(5)}$$

$$\frac{4x}{4} = \frac{60}{4}$$

$$x = 15$$

Variables left hand side

a)  $20.5 - 2.2x = 7.2x$

$$20.5 - 2.2x - 7.2x = 7.2x - 7.2x$$

$$20.5 - 9.4x = 0$$

$$\boxed{20.5 - 20.5} - 9.4x = 0 - 20.5$$

$$\frac{-9.4x}{-9.4} = \frac{-20.5}{-9.4}$$

$$x = 2.18$$

b)  $7 - 6x = 2x + 1$

$$7 - 6x - 2x = 2x - 2x + 1$$

$$7 - 8x = 1$$

$$\boxed{7 - 7} - 8x = 1 - 7$$

$$\frac{-8x}{-8} = \frac{-6}{-8}$$

$$x = \frac{6}{8} = \frac{3}{4}$$

$$\frac{x}{3} + 7 = 9$$

$$\frac{x}{3} \boxed{+ 7 - 7} = 9 - 7$$

$(3) \times \frac{x}{3} = 2(3)$

$$\frac{x}{3} = 2$$
$$x = 6$$

$$36 + 3x = 3(6x - 8)$$

$$36 + 3x = 18x - 24$$

$$36 + 3x - 18x = \boxed{18x - 18x} - 24$$

$$36 - 15x = -24$$

$$\boxed{36 - 36} - 15x = -24 - 36$$

$$\frac{-15x}{-15} = \frac{-60}{-15}$$

$$x = 4$$

$$\cancel{(4)} \frac{x}{4} = 6^{(4)}$$

$$x = 24$$

$$\cancel{(4)} \frac{122}{r} = 3^{(r)}$$

$$\frac{122}{3} = \frac{3r}{3}$$

$$r = 40.6 \bullet$$

Two rental halls are considered for a wedding.

Hall A costs \$50 a person.

Hall B costs \$2000, plus \$40 per person.

Determine the number of people for which the halls will cost the same to rent.

A. Write the equation then solve

Let "p" represent the number of people

$$A = B$$
$$50p = 2000 + 40p$$
$$50p - 40p = 2000 + \boxed{40p - 40p}$$
$$\frac{10p}{10} = \frac{2000}{10}$$
$$p = 200$$

$$-12a = 15 - 15a$$

$$-12a + 15a = 15 \boxed{-15a + 15a}$$

$$\frac{3a}{3} = \frac{15}{3}$$

$$a = 5$$



## Homework

#10 b, d, f  
#11 A,C,E  
#17 A, B  
#18

Pg 281

Answer Page 514

Worksheet 2,4,6,8,10,13,15,16,17,20

**Do NOT mark on sheet!**

