

# Warm-Up



A.  $2(5K + 4) = -22$

check

$$\begin{aligned} 10K + 8 &= -22 \\ 10K + 8 - 8 &= -22 - 8 \\ \frac{10K}{10} &= \frac{-30}{10} \\ K &= -3 \end{aligned}$$

Left side	Right side
$10K + 8$	$-22$
$10(-3) + 8$	
$-30 + 8$	
$-22$	

✓

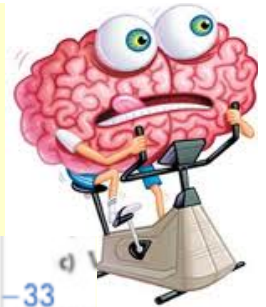
B.  $8 - \frac{3c}{4} = 5$

$$\begin{aligned} \boxed{8-8} - \frac{3c}{4} &= 5-8 \\ -\frac{3c}{4} &= -3(4) \end{aligned}$$

$$\begin{aligned} \frac{-3c}{4} &= \frac{-12}{-3} \\ c &= 4 \end{aligned}$$

LS	RS
$8 - 3(4)$	$5$
$8 - 12$	
$-4$	
$-4 = -4$	

# Textbook



8. Solve each equation.

Which strategy did you use?

Verify the solution.

- a)  $4x = 9.6$   $x = 2.4$
- b)  $10 = 3b - 12.5$   $b = 7.5$
- c)  $-5.25x = -210$   $x = 40$
- d)  $-0.5 = -2x + 8.1$   $x = 4.3$
- e)  $250 + 3.5n = 670$   $n = 120$
- f)  $-22.5 = -2c - 30.5$   $c = -4$

10. Solve each equation. Verify the solution.

- a)  $\frac{c}{3} = 15$   $c = 45$  b)  $\frac{m}{6} - 1.5 = -7$   $m = -33$
- c)  $-1.5 = \frac{n}{4}$   $n = -6$  d)  $5 = \frac{q}{-2} - 5$   $q = -20$
- e)  $\frac{2c}{5} = 1.2$   $c = 3$  f)  $1.2 = \frac{2a}{3} + 5.1$   $a = -5.85$

18. Solve each equation. Verify the solution.

- a)  $5(x - 7) = -15$   $x = 4$
- b)  $2(m + 4) = 11$   $m = 1.5$
- c)  $-3(t - 2.7) = 1.8$   $t = 2.1$
- d)  $7.6 = -2(-3 - y)$   $y = 0.8$
- e)  $8.4 = -6(a + 2.4)$   $a = -3.8$

$$\frac{2c}{5} = 1.2(5)$$

$$\frac{2c}{2} = \frac{6}{2}$$

$$c = 3$$

$$-3(t - 2.7) = 1.8$$

$$-3t + 8.1 = 1.8$$

$$-3t \boxed{-8.1 - 8.1} = 1.8 - 8.1$$

# Homework Questions???

## Worksheet Answers

1) {2}

5) {-3}

9) {0}

13) {7}

17) {-1}

2) {8}

6) {11}

10) {44}

14) {-7}

18) {-2}

3) {-15}

7) {-14}

11) {-7}

15) {-3}

19) {1}

4) {-9}

8) {5}

12) {1}

16) {-3}

20) {-1}

18.  $30 = -5(b+6x)$

16.  $-3(b+7) = -12$

$$\begin{aligned} -3b - 21 &= -12 \\ -3b \boxed{-21+21} &= -12+21 \end{aligned}$$

$-5(b+6x) = 30$

$$\begin{aligned} -30 - 30x &= 30 \\ \boxed{-30+30} - 30x &= 30+30 \\ -30x &= 60 \\ \frac{-30x}{-30} &= \frac{60}{-30} \\ x &= -2 \end{aligned}$$

# Worksheet

$$\# 17 \quad -6(6-2r) = -48$$

$$-36 + 12r = -48$$


$$\boxed{-36 + 36} + 12r = -48 + 36$$

$$\frac{12r}{12} = \frac{-12}{12}$$

$$r = -1$$

BEDMAS

Check

LS	RS
$-6[6-2(-1)]$	$-48$
$-6[6-2]$	
$-6[8]$	
$-48 =$	

$$1.2 = \frac{2a}{3} + 5.1$$

$$\frac{2a}{3} + 5.1 = 1.2$$

$$\frac{2a}{3} + 5.1 - 5.1 = 1.2 - 5.1$$

$$\frac{2a}{3} = -3.9 \quad (3)$$

$$\frac{2a}{2} = \frac{-11.7}{2}$$
$$a = -5.85$$

Check

LS	RS
$\frac{2a}{3} + 5.1$	1.2
$\frac{2 \times 5.85}{3} + 5.1$	
1.2	1
	-

# Solving Equations with Variables on Both sides

Ex. 24

A.  $6x + 2 = 10 + 4x$

$$6x - 4x + 2 = 10 + \boxed{4x - 4x}$$

$$2x + 2 = 10$$

$$2x + \boxed{2} - 2 = 10 - 2$$

$$\frac{2x}{2} = \frac{8}{2}$$

$$x = 4$$

LS	RS
$6x + 2$	$10 + 4x$
$6(4) + 2$	$10 + 4(4)$
$24 + 2$	$10 + 16$
$26$	$= 26$



B.  $-3x + 7 = 2x - 8$

Verify

$$-3x - 2x + 7 = \boxed{2x - 2x} - 8$$

$$-5x + 7 = -8$$

$$-5x \boxed{+ 7 - 7} = -8 - 7$$

$$\frac{-5x}{-5} = \frac{-15}{-5}$$

$$x = 3$$

LS	RS
$-3x + 7$	$2x - 8$
$-3(3) + 7$	$2(3) - 8$
$-9 + 7$	$6 - 8$
$-2$	$-2$

✓

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#6 all check a, c

#11 all check a, c

6. a)  $4g = 7 - 3g$

$$4g + 3g = 7 \boxed{-3g + 3g}$$
$$7g = 7$$