



Solve and verify

1) $7 - 6x = 85$

3) $10x + 4 = -2x - 32$

2) $\frac{-6x + 7}{4} = \frac{4}{5}$

4) $6(x-3) = 30$



Solve and verify

$$\begin{aligned}
 1) \quad 7 - 6x &= 85 \\
 7 - 7 - 6x &= 85 - 7 \\
 \frac{-6x}{-6} &= \frac{78}{-6} \\
 x &= -13
 \end{aligned}$$

LS	RS
$7 - 6x$	85
$7 - 6(-13)$	
$7 + 78$	
85	

$LS = RS \therefore x = -13$

$$\begin{aligned}
 2) \quad \frac{-6x}{4} + 7 &= \frac{4}{5} \\
 20\left(\frac{-6x}{4}\right) + 20(7) &= 20\left(\frac{4}{5}\right) \\
 -30x + 140 &= 16 \\
 -30x + 140 - 140 &= 16 - 140 \\
 \frac{-30x}{-30} &= \frac{-124}{-30} \\
 x &= \frac{62}{15}
 \end{aligned}$$

LS	RS
$-\frac{6x}{4} + 7$	$\frac{4}{5}$
$-\frac{3}{2}\left(\frac{31}{5}\right) + 7$	
$-\frac{31}{5} + \frac{35}{5}$	
$\frac{4}{5}$	

$LS = RS \therefore x = \frac{62}{15}$



Solve and verify

3) $10x + 4 = -2x - 32$

$$10x + 4 - 4 = -2x - 32 - 4$$

$$10x = -2x - 36$$

$$10x + 2x = -2x + 2x - 36$$

$$\frac{12x}{12} = \frac{-36}{12}$$

$$x = -3$$

LS	RS
$10x + 4$	$-2x - 32$
$10(-3) + 4$	$-2(-3) - 32$
$-30 + 4$	$6 - 32$
-26	-26

$$LS = RS \therefore x = -3$$

4) $6(x-3) = 30$

$$6x - 18 = 30$$

$$6x - 18 + 18 = 30 + 18$$

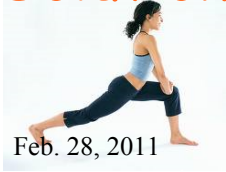
$$\frac{6x}{6} = \frac{48}{6}$$

$$x = 8$$

LS	RS
$6(x-3)$	30
$6(8-3)$	
$6(5)$	
30	

$$LS = RS \therefore x = 8$$

Solutions



$$1) 7 - 6x = 85$$

$$-6x = 78$$

$$\frac{-6x}{-6} = \frac{78}{-6}$$

$$x = -13$$

$$2) \frac{-6x}{4} + 7 = \frac{4}{5}$$

$$\frac{-120x}{4} + 140 = \frac{80}{5}$$

$$-30x + 140 = 16$$

$$-30x + 140 = 16$$

$$-30x = -124$$

$$\frac{-30x}{-30} = \frac{-124}{-30}$$

$$x = -4.1\bar{3}$$

$$3) 10x + 4 = -2x - 32$$

$$10x + 4 = -2x - 32$$

$$12x + 4 = -32$$

$$12x = -36$$

$$\frac{12x}{12} = \frac{-36}{12}$$

$$x = -4$$

$$4) 6(x-3) = 30$$

$$6x - 18 = 30$$

$$6x - 18 = 30$$

$$6x = 48$$

$$\frac{6x}{6} = \frac{48}{6}$$

$$x = 8$$

Class/Homework

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- # 8
- #10(acf)
- #11(a,c,e,f)
- #12
- #13
- #15(a,b)
- #17(abcd)
- #21 (a,d)
- #22

$$8.a) 2.4 = \frac{4.8}{s}$$

$$s(2.4) = s\left(\frac{4.8}{s}\right)$$

$$\frac{2.4s}{2.4} = \frac{4.8}{2.4}$$

$$s = 2$$

LS	RS
2.4	4.8
	<u>s</u>
	4.8
	<u>2</u>
	2.4

$LS = RS \therefore s = 2$

