

Warm Up

Solve and verify

$$1. \quad -2 + 5x = 7$$

$$\frac{5x}{5} = \frac{9}{5}$$

$$x = \frac{9}{5}$$

LS	RS
-2 + 5x	7
-2 + 5($\frac{9}{5}$)	
-2 + 9	
7	

$$LS = RS \therefore x = \frac{9}{5}$$

$$2. \quad \frac{6}{r} + 9 = 0$$

$$\frac{6}{r} = -9$$

$$r\left(\frac{6}{r}\right) = r(-9)$$

$$6 = -9r$$

$$\frac{-2}{-9} = \frac{r}{-9}$$

$$\frac{-2}{3} = r$$

LS	RS
$\frac{6}{r} + 9$	0
$6 \div \left(\frac{-2}{3}\right) + 9$	0
$6x \frac{-3}{2} + 9$	
-9 + 9	
0	

$$LS = RS \therefore r = \frac{-2}{3}$$

New examples

1. $\frac{3}{4} + 2x = 6$

Method I

$$2x = 6 - \frac{3}{4}$$

$$2x = \frac{24}{4} - \frac{3}{4}$$

$$\frac{2x}{2} = \frac{21}{4} \div 2$$

$$x = \frac{21}{4} \times \frac{1}{2}$$

$$= \frac{21}{8}$$

Method II

$$4\left(\frac{3}{4}\right) + 4(2x) = 4(6)$$

$$3 + 8x = 24$$

$$\frac{8x}{8} = \frac{21}{8}$$

$$x = \frac{21}{8}$$

2. $\frac{x}{3} + \frac{3}{5} = 4$

$$5x + 9 = 60$$

$$\frac{5x}{5} = \frac{51}{5}$$

$$x = \frac{51}{5}$$

Class / Homework...

Continue working on algebra sheets.