

#1

Chapter 3 Review

Snake Review OR Stations!

$$\begin{array}{r} \boxed{9x} + 27 = -72 \\ -27 \quad -27 \\ \hline 9x = -99 \\ \frac{9x}{9} = \frac{-99}{9} \\ x = -11 \end{array}$$

#2

$$\begin{array}{r} \boxed{\frac{b}{3}} + 6 = 4 \\ -6 \quad -6 \\ \hline \frac{b}{3} = -2 \\ 3 \cdot \frac{b}{3} = -2 \cdot 3 \\ b = -6 \end{array}$$

#4

LCD: 4

#3

$$\begin{array}{r} \frac{-5}{2} = \frac{3}{4}z + \frac{1}{2} \\ -10 = 3z + 2 \\ -2 \\ \hline -12 = 3z \\ \frac{-12}{3} = \frac{3z}{3} \\ -4 = z \end{array}$$

#5

$$\begin{array}{r} -5x + 5 = 10x + 3(5x + 4) \\ -5x + 5 = 10x - 15x - 12 \\ -5x + 5 = -5x - 12 \\ +5x \quad +5x \\ 5 = -12 \\ \text{No Solution} \end{array}$$

$$\begin{array}{r} \textcircled{3w} + 2 = \textcircled{7w} \\ -3w \quad -3w \\ \hline 2 = 4w \\ \frac{2}{4} = \frac{4w}{4} \\ \frac{1}{2} = w \text{ or } .5 \end{array}$$

#6

$$14v + 6 = 2(5 + 7v) - 4$$

$$14v + 6 = 10 + 14v - 4$$

$$\cancel{14v} + 6 = 6 + \cancel{14v}$$

$$-14v \quad -14v$$

$$6 = 6 \text{ True!}$$

"IDENTITY"
Infinitely Many Solutions

#7

$$14.2t + 11.7 = 3.8t + 19.5$$

$$- 3.8t \quad - 3.8t$$

$$10.4t + 11.7 = 19.5$$

$$- 11.7 \quad - 11.7$$

$$10.4t = 7.8$$

$$\frac{10.4t}{10.4} = \frac{7.8}{10.4}$$

$$t = .75$$

#8

PROPORTION

$$\frac{-4}{u-2} = \frac{6}{u-19.5}$$

Cross-Multiply

Rate of change

$$-4(u-19.5) = 6(u-2)$$

$$\cancel{-4}u + 78 = 6u - 12$$

$$+4u \quad +4u$$

$$78 = 10u - 12$$

$$+12 \quad +12$$

$$90 = 10u$$

$$\frac{90}{10} = \frac{10u}{10}$$

$$u = 9$$

The length of a rectangle is twice the width. The perimeter of the rectangle is 42 feet. What is the length and width of the rectangle?

l = length
w = width



$$l = 2w$$

$$P = l + w + l + w$$

$$P = (2w) + w + (2w) + w$$

$$P = 6w$$

$$P = 6w$$

$$42 = 6w$$

$$7 = w$$

$$l = 2w = 2(7) = 14$$

#9

Orlando has \$1350 in the bank. He wants to buy his first car that costs \$2550. He deposits \$40 each week from his paycheck. How many weeks will he need to save before he will reach his goal? $w = \text{weeks}$

Begin	Rate	Total
1350	+ 40w	= 2550
-1350		-1350
<hr/>		
40w	=	1200
40		40

$$w = 30 \text{ weeks}$$

He must work at least 30 weeks.

$$l = 14 \text{ ft.}$$

$$w = 7 \text{ ft.}$$