

Unit 2 Quiz Review:

$$1. \begin{array}{r} -7 \quad | \quad p - 10 \\ +10 \quad | \quad +10 \\ \hline 3 = p \end{array}$$

$$2. \begin{array}{r} b + \frac{7}{9} = \frac{-13}{18} \\ -\frac{7}{9} \quad -\frac{7}{9} \\ \hline b = \frac{-3}{2} \end{array}$$

$$3. \begin{array}{r} \frac{1}{3}n = -3 \\ \frac{1}{3} \quad \frac{1}{3} \\ \hline n = -9 \end{array}$$

$$4. \begin{array}{r} -7x = 343 \\ -7 \quad -7 \\ \hline x = -49 \end{array}$$

$$5. \begin{array}{r} \frac{-2}{3}x = -32 \\ -\frac{2}{3} \quad -\frac{2}{3} \\ \hline x = 48 \end{array}$$

$$6. \begin{array}{r} 12x = 50 \\ \frac{12}{12} \quad \frac{12}{12} \\ \hline x = \frac{25}{6} \\ \text{or} \\ x = 4 \frac{1}{6} \end{array}$$

$$7. \begin{array}{r} 5x + 8 = 48 \\ -8 \quad -8 \\ \hline 5x = 40 \\ \frac{5}{5} \quad \frac{5}{5} \\ \hline x = 8 \end{array}$$

Meet/Mult

$$8. \begin{array}{r} 3(x - 18) = 18 \\ 3x - 54 = 18 \\ +54 \quad +54 \\ \hline 3x = 72 \\ \frac{3}{3} \quad \frac{3}{3} \\ \hline x = 24 \end{array}$$

$$9. \begin{array}{r} 7 + \frac{v}{8} = -5 \\ -7 \quad -7 \\ \hline \frac{v}{8} = -12 \\ \frac{1}{8} \quad \frac{1}{8} \\ \hline v = -96 \end{array}$$

Meet/Mult

$$10. \begin{array}{r} -10 = 18x - 5(x - 4) \\ -10 = 18x - 5x + 20 \\ \text{Combine like terms} \\ -10 = 13x + 20 \\ -20 \quad -20 \\ \hline -30 = 13x \\ \frac{-30}{13} \quad \frac{13}{13} \\ \hline \frac{-30}{13} = x \text{ or } -2.3 \end{array}$$

$$11. \begin{array}{r} \frac{2+2x}{9} = -2 \\ \text{Mult} \\ \text{what's on top,} \\ \text{slays on top} \\ 2 + 2x = -18 \\ -2 \quad -2 \\ \hline 2x = -20 \\ \frac{2}{2} \quad \frac{2}{2} \\ \hline x = -10 \end{array}$$

$$12. \begin{array}{r} \frac{7}{5}x - 3 = 74 \\ +3 \quad +3 \\ \hline \frac{7}{5}x = 77 \\ \frac{7}{5} \quad \frac{7}{5} \\ \hline x = 55 \end{array}$$

$$13. \begin{array}{r} 47 = 18 - x \\ +18 \quad +18 \\ \hline 65 = -x \\ -1 \quad -1 \\ \hline -65 = x \end{array}$$

$$14. \begin{array}{r} -8 = 77 - 5x \\ -77 \quad -77 \\ \hline -85 = -5x \\ -5 \quad -5 \\ \hline 17 = x \end{array}$$

$$15. \begin{array}{r} -33x - 14 + 18x = 1 \\ \text{combine like terms} \\ -15x - 14 = 1 \\ +14 \quad +14 \\ \hline -15x = 15 \\ \frac{-15}{-15} \quad \frac{15}{-15} \\ \hline x = -1 \end{array}$$

Name: _____

Date: _____

16. Negative eight times a number is -144. Write the equation and solve it.

Equation: $-8x = -144$

$$\begin{array}{r} \underline{-8} \quad \underline{-8} \\ x = 18 \end{array}$$

17. The quotient of a number and 18 is 198. Write the equation and solve it.

Equation: $\frac{1x}{18} = 198$

$$\begin{array}{r} \underline{\frac{1}{18}} \quad \underline{\frac{1}{18}} \\ x = 3564 \end{array}$$

18. A number increased by -67 is -967. Write the equation and solve it.

Equation: $x + -67 = -967$

$$\begin{array}{r} \boxed{x} - 67 = -967 \\ \underline{-67} \quad \underline{+67} \\ x = -900 \end{array}$$

19. Three less than four times a number is 99. Write the equation and solve it.

Equation: $4x - 3 = 99$

$$\begin{array}{r} \underline{+3} \quad \underline{+3} \\ 4x = 102 \\ \underline{4} \quad \underline{4} \\ x = 25.5 \end{array}$$

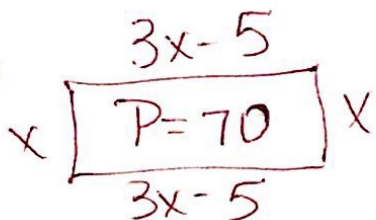
20. A rectangle has a length of $3x - 5$ and a width of x . The total perimeter is 70 feet. Write an equation and solve for x . Find the length and width.

Equation: $(3x - 5) + x + (3x - 5) + x = 70$

$x = 10$

Length: $3x - 5 = 3(10) - 5 = 25$

Width: $x = 10$



Add up all sides
Combine Like terms

$$\begin{array}{r} \boxed{8x} - 10 = 70 \\ \underline{+10} \quad \underline{+10} \end{array}$$

$$\begin{array}{r} 8x = 80 \\ \underline{8} \quad \underline{8} \\ x = 10 \end{array}$$