

New

Assign #4

Book pg 40: 9, 11, 19-37 odd

9. $|x+5|=18$

$$\begin{array}{r} x+5=18 \\ -5 \quad -5 \\ \hline x=13 \end{array}$$

$$\begin{array}{r} x+5=-18 \\ -5 \quad -5 \\ \hline x=-23 \end{array}$$

$x=13, -23$

11. $|x-6|=12$

$$\begin{array}{r} x-6=12 \\ +6 \quad +6 \\ \hline x=18 \end{array}$$

$$\begin{array}{r} x-6=-12 \\ +6 \quad +6 \\ \hline x=-6 \end{array}$$

$x=18, -6$

Evaluate each expression if $x=-4, y=5, z=1, 2$

19. $|x+y| \rightarrow |-4+5| = |1| = \boxed{1}$

21. $-|2z-4| = -|2(1.2)-4| = -|2.4-4| = -|1.6| = \boxed{-1.6}$

23. $7-|3z+10| = 7-|3(1.2)+10| = 7-|3.6+10|$
 $= 7-|13.6| = 7-13.6 = \boxed{-6.6}$

Solve

25. $|x-3|=17$

$$\begin{array}{r} x-3=17 \\ +3 \quad +3 \\ \hline x=20 \end{array}$$

$$\begin{array}{r} x-3=-17 \\ +3 \quad +3 \\ \hline x=-14 \end{array}$$

$x=20, -14$

$$27. |x + 11| = 42$$

$$\begin{array}{r} x + 11 = 42 \\ -11 \quad -11 \\ \hline \end{array}$$

$$x = 31$$

$$\begin{array}{r} x + 11 = -42 \\ -11 \quad -11 \\ \hline \end{array}$$

$$x = -53$$

$$x = 31, -53$$

$$29. \frac{11}{11} |x - 9| = \frac{121}{11}$$

$$|x - 9| = 11$$

$$\begin{array}{r} x - 9 = 11 \\ +9 \quad +9 \\ \hline \end{array}$$

$$x = 20$$

$$\begin{array}{r} x - 9 = -11 \\ +9 \quad +9 \\ \hline \end{array}$$

$$x = -2$$

$$x = 20, -2$$

$$31. \frac{8}{8} |x - 3| = \frac{88}{8}$$

$$|x - 3| = 11$$

$$\begin{array}{r} x - 3 = 11 \\ +3 \quad +3 \\ \hline \end{array}$$

$$x = 14$$

$$\begin{array}{r} x - 3 = -11 \\ +3 \quad +3 \\ \hline \end{array}$$

$$x = -8$$

$$x = 14, -8$$

$$33. |4x - 3| = -27$$

\emptyset , no solution

Assign #4 cont

$$35. \quad \frac{3}{3} | 3x+2 | = \frac{5}{3}$$

$$|3x+2| = 17$$

$$\frac{3x+2}{-2} = \frac{17}{-2}$$

$$\frac{3x}{3} = \frac{15}{3}$$

$$x = 5$$

$$\frac{3x+2}{-2} = \frac{-17}{-2}$$

$$\frac{3x}{3} = \frac{19}{3}$$

$$x = \frac{19}{3}$$

$$x = 5, \frac{19}{3}$$

$$37. \quad \frac{4}{4} | 6x-1 | = \frac{29}{4}$$

$$|6x-1| = \frac{29}{4}$$

$$\frac{6x-1}{+1} = \frac{29}{4} + 1$$

$$6x = \frac{29}{4} + \frac{4}{4}$$

$$\frac{6x}{6} = \frac{33}{4} \cdot \frac{1}{2}$$

$$x = \frac{11}{8}$$

$$\frac{6x-1}{+4/4} = \frac{-29}{4} + \frac{4}{4}$$

$$\frac{6x}{6} = \frac{-25}{4} \cdot \frac{1}{6}$$

$$x = \frac{-25}{24}$$

$$x = \frac{11}{8}, \frac{-25}{24}$$

New cont
Packet

$$1. \quad |x+9| - 8 = 5$$
$$\quad \quad \quad +8 \quad +8$$

$$|x+9| = 13$$

$$x+9 = 13$$
$$\quad -9 \quad -9$$
$$x = 4$$

$$x+9 = -13$$
$$\quad -9 \quad -9$$
$$x = -22$$

$$x = 4, -22$$

$$2. \quad |p+1| + 10 = 5$$
$$\quad \quad \quad -10 \quad -10$$

$$|p+1| = -5$$

NO SOLUTION

$$3. \quad 2|2d-7| + 1 = 35$$
$$\quad \quad \quad -1 \quad -1$$

$$\frac{2|2d-7|}{2} = \frac{34}{2}$$

$$|2d-7| = 17$$

$$2d-7 = 17$$
$$\quad +7 \quad +7$$

$$2d-7 = -17$$
$$\quad +7 \quad +7$$

$$\frac{2d}{2} = \frac{24}{2}$$

$$\frac{2d}{2} = \frac{-10}{2}$$

$$d = 12$$

$$d = -5$$

$$d = 12, -5$$

Review

$$4. -9.26 - 38.5 = \boxed{-47.76}$$

$$\begin{array}{r} 38.50 \\ + 9.26 \\ \hline 47.76 \end{array}$$

$$5. (-3.6)(0.057) = \boxed{-0.2052}$$

$$\begin{array}{r} 3.6 \\ \times 0.057 \\ \hline 252 \\ 1800 \\ \hline 2052 \end{array}$$

$$6. \left(-5\frac{1}{4}\right)\left(-2\frac{3}{7}\right) = \left(-\frac{21}{4}\right)\left(\frac{17}{7}\right) = \boxed{\frac{51}{4}}$$

$$7. -\frac{4}{5} - \left(-\frac{2}{3}\right) = -\frac{4}{5} + \frac{2}{3} = -\frac{12}{15} + \frac{10}{15} = \boxed{-\frac{2}{15}}$$

$$8. \frac{3}{5} - \frac{5}{8} + \frac{1}{4} = \frac{24}{40} - \frac{25}{40} + \frac{10}{40} \\ = \frac{-1}{40} + \frac{10}{40} = \boxed{\frac{9}{40}}$$

Book pg 10: 24, 34

$$\begin{aligned} 24. & 7 - [4 + (6 \cdot 5)] \\ & = 7 - [4 + 30] \\ & = 7 - 34 \\ & = \boxed{-27} \end{aligned}$$

$$\begin{aligned}
 24. \quad & 3 + [8 \div (9 + 2(-4))] \\
 & = 3 + [8 \div (9 - 8)] \\
 & = 3 + [8 \div 1] \\
 & = 3 + 8 \\
 & = \boxed{11}
 \end{aligned}$$

Book pg 17: 28, 30

$$28. \quad 10 \times (-3.9) = \boxed{-39; \mathbb{R}, \mathbb{Q}, \mathbb{Z}}$$

$$30. \quad -81 \div (-9) = \boxed{9; \mathbb{R}, \mathbb{Q}, \mathbb{Z}, \mathbb{W}, \mathbb{N}}$$

Book pg 31: * 6, 20, 22, 32, 36, 38, 40

6. Three decreased by twice a number

$$\boxed{3 - 2x}$$

20. twice the sum of a number & 11

$$\boxed{2(x + 11)}$$

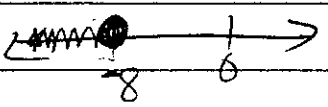
22. the product of the square of a number and 5.

$$\boxed{5x^2}$$

$$\begin{array}{r}
 32. \quad 14 - x = -7 \\
 \underline{-14 \quad -14} \\
 -x = -21 \rightarrow \boxed{x = 21}
 \end{array}$$

$$18. \quad \begin{array}{r} 15 - 5t \geq 55 \\ -15 \quad -15 \\ \hline \end{array}$$

$$\begin{array}{r} -5t \geq 40 \\ \frac{-5t}{-5} \geq \frac{40}{-5} \end{array}$$

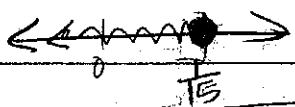
$$t \leq -8$$


$$22. \quad 40 \leq -6(5r - 7)$$

$$\begin{array}{r} 40 \leq -30r + 42 \\ -42 \quad -42 \\ \hline \end{array}$$

$$\begin{array}{r} -2 \leq -30r \\ \frac{-2}{-30} \geq \frac{-30r}{-30} \end{array}$$

$$\frac{1}{15} \geq r$$

$$r \leq \frac{1}{15}$$


$$24. \quad 9(2x + 3) > 10$$

$$\begin{array}{r} 18x + 27 > 10 \\ -27 \quad -27 \\ \hline \end{array}$$

$$\begin{array}{r} 18x > -17 \\ \frac{18x}{18} > \frac{-17}{18} \end{array}$$

$$x > -\frac{17}{18}$$
