

Date : 10.24.18

$$\begin{aligned} \# & -(3x+4) + 5(x-2) - 3(6x-8) \\ & = -3x - 4 + 5x - 10 - 18x + 24 \\ & = 10 - 16x \end{aligned}$$

[Expression]

Assessment 4 practice test :

$$\begin{aligned} 1. \text{ (a)} & 7(a+b) \\ & = 7a + 7b \end{aligned}$$

$$\begin{aligned} 1. \text{ (b)} & 4(l+w) \\ & = 4l + 4w \end{aligned}$$

$$\begin{aligned} 2. \text{ (a)} & 5(3x-4y) \\ & = 15x - 20y \end{aligned}$$

$$\begin{aligned} 2. \text{ (b)} & -6(4p-9) \\ & = -24p + 6q \end{aligned}$$

$$\begin{aligned}
 3. \text{ (a)} \quad & -7x + 5 + 3x - x \\
 & = (-7 + 3 - 1)x + 5 \\
 & = -5x + 5
 \end{aligned}$$

$$\begin{aligned}
 3. \text{ (b)} \quad & -11p + 5p + 6 + 2p \\
 & = (-11 + 5 + 2)p + 6 \\
 & = -4p + 6
 \end{aligned}$$

$$\begin{aligned}
 4. \text{ (a)} \quad & -3(2z-6) + 5(2z-5) \\
 & = -6z + 18 + 10z - 25 \\
 & = 4z - 7
 \end{aligned}$$

$$\begin{aligned}
 4. \text{ (b)} \quad & 2(5x+4) - 3(7x-3) \\
 & = 10x + 8 - 21x + 9 \\
 & = -11x + 17
 \end{aligned}$$

$$\begin{aligned}
 5. \text{ (a)} \quad & -(3x-4) + 6(2x-5) - 3x \\
 & = -3x + 4 + 12x - 30 - 3x \\
 & = 6x - 26
 \end{aligned}$$

$$\begin{aligned}
 & 2(3k-4) - 1(8k-5) - 2 \\
 &= 6k - 8 - 8k + 5 - 2 \\
 &= -2k - 5
 \end{aligned}$$

$$\begin{aligned}
 6. \text{ (a)} \quad & 7x - 10 = 18 \\
 & \quad +10 \quad +10 \\
 & \frac{7x}{7} = \frac{28}{7} \\
 \therefore x &= 4
 \end{aligned}$$

$$\begin{aligned}
 \# \quad & 5x + 13 - 3x = -8 - x \\
 \Rightarrow & \begin{array}{r} 2x + 13 \\ +x \end{array} = \begin{array}{r} -8 - x \\ +x \end{array} \\
 \Rightarrow & \begin{array}{r} 3x + 13 \\ -13 \end{array} = \begin{array}{r} -8 \\ -13 \end{array} \\
 \Rightarrow & \frac{3x}{3} = \frac{-21}{3} \\
 \therefore x &= -7
 \end{aligned}$$

$$\begin{aligned}
 6. \text{ (b)} \quad & 15y + 18 = 38 \\
 & \quad -18 \quad -18 \\
 \Rightarrow & \frac{15y}{15} = \frac{20}{15} \\
 \Rightarrow & y = \frac{4}{3}
 \end{aligned}$$

$$\begin{aligned}
 7. \text{ (b)} \quad & 2x + 4 - x = 4x - 5 \\
 & \quad -4x \quad -4x \\
 \Rightarrow & \begin{array}{r} -3x + 4 \\ -4 \end{array} = \begin{array}{r} -5 \\ -4 \end{array} \\
 \Rightarrow & \frac{-3x}{-3} = \frac{-9}{-3} \\
 \Rightarrow & x = 3
 \end{aligned}$$

check:

$$\begin{aligned}
 & 2(3) + 4 - 3 \stackrel{?}{=} 4(3) - 5 \\
 \Rightarrow & 6 + 4 - 3 \stackrel{?}{=} 12 - 5 \\
 \Rightarrow & 7 \stackrel{\checkmark}{=} 7
 \end{aligned}$$

$$8. \textcircled{a} \quad 5(p+6) = 2p-18$$

$$\Rightarrow \begin{array}{r} 5p+30 \\ -2p \end{array} = \begin{array}{r} 2p-18 \\ -2p \end{array}$$

$$\Rightarrow \begin{array}{r} 3p+30 \\ -30 \end{array} = \begin{array}{r} -18 \\ -30 \end{array}$$

$$\Rightarrow \frac{3p}{3} = \frac{-48}{3}$$

$$\therefore p = -16$$

$$8. \textcircled{b} \quad 6z - 3(8z-4) = -4 + 10z$$

$$\Rightarrow 6z - 24z + 12 = -4 + 10z$$

$$\Rightarrow \begin{array}{r} -18z+12 \\ -12z \end{array} = \begin{array}{r} -4+10z \\ -12 \end{array}$$

$$\Rightarrow \begin{array}{r} -18z \\ -10z \end{array} = \begin{array}{r} -16+10z \\ -10z \end{array}$$

$$\Rightarrow \frac{-8z}{-8} = \frac{-16}{-8}$$

$$\Rightarrow z = 2$$

$$9. \textcircled{a} \frac{3}{3} \frac{x}{5} + \frac{5}{5} \frac{x}{3} = \frac{16 \cdot 15}{1 \cdot 15}$$

$$\Rightarrow \frac{3x}{15} + \frac{5x}{15} = \frac{240}{15}$$

$$\Rightarrow 3x + 5x = 240$$

$$\Rightarrow \frac{8x}{8} = \frac{240}{8}$$

$$\therefore x = 30$$

$$10. \textcircled{a} \frac{4(x-6)}{4 \cdot 2} + \frac{3}{8} = -\frac{x \cdot 2}{4 \cdot 2}$$

$$\Rightarrow \frac{4(x-6)}{8} + \frac{3}{8} = -\frac{2x}{8}$$

$$\Rightarrow \begin{array}{r} 4x - 24 + 3 \\ + 2x \end{array} = \begin{array}{r} -2x \\ + 2x \end{array}$$

$$\Rightarrow \begin{array}{r} 6x - 21 = 0 \\ + 21 \quad + 21 \end{array}$$

$$\Rightarrow \frac{6x}{6} = \frac{21}{6}$$

$$\therefore x = \frac{7}{2}$$

check the answer by putting $\frac{7}{2}$ in the equ.