

Date: 10.10.18

Book no. 78 : (Algebraic expression)

$$a + 7b \quad \text{if } a = -3$$

$$b = -6$$

$$1(-3) + 7(-6)$$

$$= -3 - 42$$

$$= -45$$

80. $9p + 4t + w$

$$\left\{ \begin{array}{l} p = 2 \\ t = 6 \\ w = -50 \end{array} \right.$$

$$= 9(2) + 4(6) + 1(-50)$$

$$= \boxed{18 + 24} - 50$$

$$= 42 - 50$$

$$= -8$$

82. $w + 2y - z$

$$\left\{ \begin{array}{l} w = -9 \\ y = 10 \\ z = -3 \end{array} \right.$$

$$= 1(-9) + 2(10) - 1(-3)$$

$$= \boxed{-9 + 20} + 3$$

$$= 11 + 3 = 14$$

~~#8~~

#84. $-5pq$

$p = -4$

$q = -2$

$= (-5)(-4)(-2)$

$= 20(-2) = 40$

#94. $-2|4a-b|$

$a = -8$

$b = -2$

$= -2|4(-8) - 1(-2)|$

$= -2|-32 + 2|$

$= -2|-30|$

$= -2(30)$

$= -60$

#96. $4-|e^v-d^v|$

$e = 3$

$d = -5$

$= 4-|(3)^v - (-5)^v|$

$= 4-|9-25|$

$= 4-|-16|$

$= 4-16$

$= -12$

$$\begin{aligned}
 26. \quad (a) \quad & 2x - 7y & \begin{cases} x = -4 \\ y = -2 \end{cases} \\
 & \Rightarrow 2(-4) - 7(-2) \\
 & = -8 + 14 \\
 & = 6
 \end{aligned}$$

$$\begin{aligned}
 26. \quad (b) \quad & 2y - 5x & \begin{cases} x = -4 \\ y = -2 \end{cases} \\
 & = 2(-2) - 5(-4) \\
 & = -4 + 20 \\
 & = 16
 \end{aligned}$$

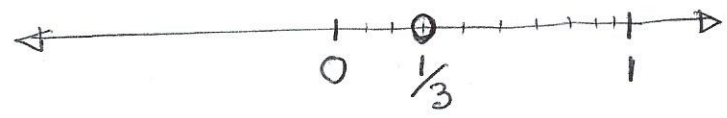
$$\begin{aligned}
 29. \quad A &= \pi r^2 & r &= 6 \text{ inch} \\
 &= \pi (6)^2 & \pi &= 3.14 \\
 &= 3.14 (6)^2 \\
 &= 113.04 \text{ inch}^2
 \end{aligned}$$

$$\begin{aligned}
 30. \quad V &= \frac{4\pi r^3}{3} = \frac{4 \cdot 3.14 \cdot (6)^3}{3} \\
 &= \frac{4 \cdot 3.14 \cdot 216 \text{ in}^3}{3} \\
 &= 904.32 \text{ in}^3
 \end{aligned}$$

Book no. 50

90. $\frac{1}{3}$

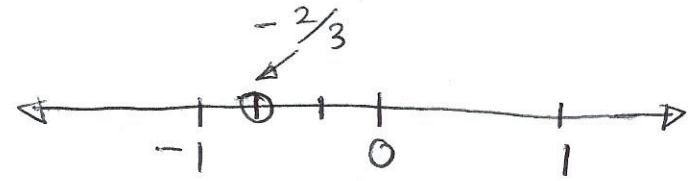
$$\begin{aligned}
 & 6 \frac{1}{3} \\
 &= \frac{(6 \times 3) + 1}{3} \\
 &= \frac{19}{3}
 \end{aligned}$$



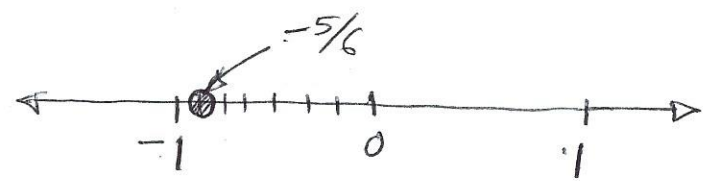
52. $-3 \frac{1}{5}$

$$\begin{aligned}
 &= \frac{-\{3(5) + 1\}}{5} \\
 &= \frac{-(15 + 1)}{5} \\
 &= -\frac{16}{5}
 \end{aligned}$$

91. $-\frac{2}{3}$



92. $-\frac{5}{6}$



59. $-21 \frac{3}{8}$

$$= -\frac{171}{8}$$

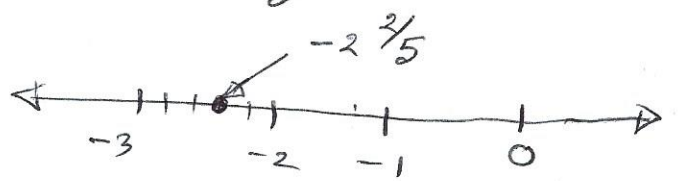
94. $-\frac{12}{5}$

77. $-\frac{23}{6} = -3 \frac{5}{6}$

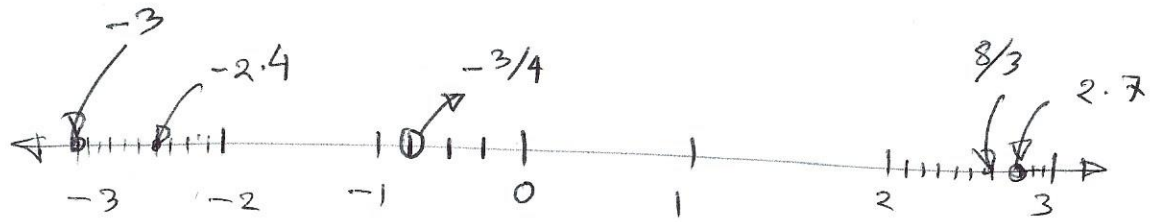
$$\begin{array}{r}
 3 \\
 6 \overline{) 23} \\
 \underline{-18} \\
 5
 \end{array}$$

$$\begin{array}{r}
 2 \\
 5 \overline{) 12} \\
 \underline{10} \\
 2
 \end{array}$$

$-2 \frac{2}{5}$



11.



Book 20.

$$\frac{7}{12} \cdot \frac{18}{5}$$

$$= \frac{7 \cdot 1}{\cancel{2} \cdot 2 \cdot \cancel{3}} \cdot \frac{\cancel{2} \cdot \cancel{3} \cdot 3}{5 \cdot 1}$$

$$= \frac{21}{10}$$

12. $\left(-\frac{3}{10}\right) \left(-\frac{7}{4}\right)$

$$= \frac{3 \cdot 3}{2 \cdot 5} \cdot \frac{7}{2 \cdot 2}$$

$$= \frac{63}{40}$$

24. $\frac{49}{24} \cdot \left(-\frac{6}{7}\right)$

$$= -\frac{7 \cdot \cancel{7}}{2 \cdot 2 \cdot \cancel{2} \cdot \cancel{3}} \cdot \frac{\cancel{2} \cdot \cancel{3}}{\cancel{7}}$$

$$= -\frac{7}{4}$$