

Answers to Stations #2 9/24

① $\frac{63}{81} \div 9 \rightarrow \boxed{\frac{7}{9}}$

② Common denominator of 20

$\frac{15}{20}$ and $\frac{8}{20}$ and $\frac{6}{20} \rightarrow$ in order $\frac{3}{10}, \frac{2}{5}, \frac{3}{4}$
③ ② ①

③ $\frac{4}{6} + \frac{3}{6} = \boxed{\frac{7}{6}}$

Get a common denominator of 6.

④ $\frac{1}{3} - 2\frac{3}{7} = \frac{1}{3} - \frac{17}{7}$

mixed # \rightarrow improper fraction

$= \frac{1 \times 7}{3 \times 7} - \frac{17 \times 3}{7 \times 3} = \frac{7}{21} - \frac{51}{21} = \boxed{\frac{-44}{21}}$

Common denom. is 21

subtr. numerators

⑤ $12 \times \frac{3}{4} = \frac{12}{1} \times \frac{3}{4} = \frac{36}{4} = \frac{9}{1} = \boxed{9}$

⑥ $4a - 18a - 6 + 15 = \boxed{-14a + 9}$

⑦ $2x + 13 = 32$
 $\underline{-13 \quad -13}$
 $2x = 19$
 $\underline{\quad \quad \quad 2}$

$x = \frac{19}{2}$ or 9.5

⑩ $21 \div 1\frac{3}{4} = 21 \div \frac{7}{4} = 21 \times \frac{4}{7}$

Change $1\frac{3}{4}$ into an improper fraction

Division is multiplying by the reciprocal of the divisor.

$\frac{21}{1} \times \frac{4}{7} = \frac{84}{7} = \boxed{12}$

⑧ $\begin{matrix} 6x+1 & & 4x \\ 4x & \square & 4x \\ & 6x+1 & \end{matrix}$

$P = 6x+1 + 4x + 6x+1 + 4x$
 $= \boxed{20x + 2}$

⑪ $\frac{x-5}{8} = 2$ multiply both sides by 8

$\frac{8}{1} \cdot \frac{x-5}{8} = 2 \cdot 8$

$\frac{8}{8} = 1$ The eights reduce to 1

$x-5 = 16$
 $\underline{+5 \quad +5}$
 $\boxed{x = 21}$

add 5 to both sides

⑨ $5(x-2) + 6 = 26$
 $\underline{-6 \quad -6}$
 $\frac{5(x-2)}{5} = \frac{20}{5}$

$x-2 = 4$

$\underline{+2 \quad +2}$
 $\boxed{x = 6}$

⑫ $5 - 2(9z - 4)$ mult -2 through the parentheses
 $5 - 18z + 8$ add the like terms 5+8
 $\boxed{13 - 18z}$