

Objective #2

Operations with rational numbers

1. Simplify: $-3.8 - (-4.6) + 5.4$ [A] 6.2 [B] -6.2 [C] 4.6 [D] -4.6

$$\begin{array}{r} 0.8 + 5.4 \\ \hline 6.2 \end{array}$$

Add:

2. [A] $\frac{5}{6}$ [B] $1\frac{8}{15}$ [C] 1 [D] $\frac{23}{45}$

$\frac{2}{3} + \frac{13}{15}$ common denominator = 15

$\frac{2}{3} \times \frac{5}{5} = \frac{10}{15}$ improper fraction

$\frac{10}{15} + \frac{13}{15} = \frac{23}{15}$ 15 goes into 23 once w/ 8 leftover $\Rightarrow 1\frac{8}{15}$

3. [A] $\frac{1}{24}$ [B] $\frac{7}{24}$ [C] $-\frac{7}{24}$ [D] $-\frac{1}{24}$

$-\frac{1}{8} + (-\frac{1}{6})$ least common denominator $\rightarrow 24$

$-\frac{1}{8} \times \frac{3}{3} = -\frac{3}{24}$ $-\frac{3}{24} + -\frac{4}{24} = -\frac{7}{24}$

$-\frac{1}{6} \times \frac{4}{4} = -\frac{4}{24}$

4. Multiply: $-1.3 \cdot (-7.8)$ [A] 11.14 [B] 10.14 [C] -10.14 [D] -11.14

multiplying two negative #'s \Rightarrow positive #
 $(-1.3)(-7.8) = (1.3)(7.8)$

$$\begin{array}{r} 1.3 \\ \times 7.8 \\ \hline 104 \\ + 910 \\ \hline 10.14 \end{array}$$