

Adding and Subtracting Fractions with Like Denominators

- To add or subtract fractions with like (the same) denominators, simply add the numerators. The denominators stay the same.

$$\text{eg) } \frac{2}{5} + \frac{2}{5} = \boxed{\frac{4}{5}}$$

$$\text{eg) } \frac{5}{6} + \frac{3}{6} = \frac{8}{6} = 1\frac{2}{6} = \boxed{1\frac{1}{3}}$$

$$\text{eg) } \frac{7}{8} - \frac{3}{8} = \frac{4}{8} = \boxed{\frac{1}{2}}$$

- When adding or subtracting mixed numbers, first change the mixed number to an improper fraction:

- o Recall:

$$2\frac{3}{5} = \frac{13}{5}$$

- Once you have changed the mixed numbers to improper fractions, simply add or subtract the numerators. The denominators stay the same.

$$\text{ex) } 3\frac{3}{8} + 2\frac{6}{8} = \frac{27}{8} + \frac{22}{8} = \frac{49}{8} = \boxed{6\frac{1}{8}}$$

$$\text{ex) } 2\frac{1}{4} - 1\frac{3}{4} = \frac{9}{4} - \frac{7}{4} = \frac{2}{4} = \boxed{\frac{1}{2}}$$

- Finally, change the answer back to a mixed number, if necessary.

- o Recall:

$$\frac{17}{4} = 4\frac{1}{4} \quad 4 \overline{)17} \begin{array}{r} 4R1 \\ -16 \\ \hline 1 \end{array}$$