

Practice!

1) $5\frac{7}{8} + (-3\frac{1}{2})$

Change to improper fractions.

$$5\frac{7}{8} \rightarrow \text{Numerator} > \text{Denominator}$$

$$5\frac{7}{8} = \frac{(5 \times 8) + 7}{8} \quad * \text{Denominator the same.}$$

$$5\frac{7}{8} = \frac{40 + 7}{8} = \frac{47}{8}$$

$$-3\frac{1}{2} = -\frac{(3 \times 2) + 1}{2} = -\frac{6 + 1}{2} = -\frac{7}{2}$$

Problem becomes $\frac{47}{8} + \frac{7}{2}$

Find Lowest Common (LCD)
DenominatorLCD is the smallest # that
can be divided by 8 and 2 with
no remainder?

	^{x1}	^{x2}	^{x3}	^{x4}	^{x5}
2	2	4	6	8	16
8	8	16	24	32	

Write both fractions with
denominator of 8:

$$\frac{47}{8} \quad \checkmark \text{denominator is 8!}$$

$$-\frac{7 \times 4}{2 \times 4} \quad \left. \begin{array}{l} \text{Mult top and} \\ \text{bottom by the} \\ \text{\# to get LCD} \end{array} \right\}$$

$$-\frac{28}{8}$$

Now, add: $\frac{47}{8} + \left(-\frac{28}{8}\right)$

$$\frac{47 - 28}{8} \quad \leftarrow \text{Add (subtract) numerators}$$

$$8 \quad \leftarrow \text{Does not change}$$

$$\boxed{= \frac{19}{8}}$$