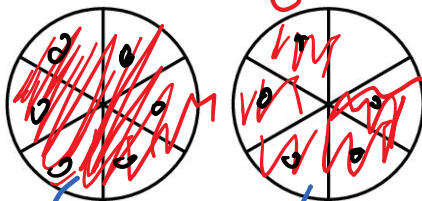


5.3 Addition with Mixed Numbers (5.6 in Textbook)

We have already seen improper fractions such as

$\frac{11}{6}$ Improper

Which we can represent as:



Since we have more than one complete circle we can write this as mixed number:

mixed

$$\frac{11}{6} = \frac{6}{6} + \frac{5}{6} = 1\frac{5}{6}$$

When adding mixed numbers there are two strategies that we can use:

1) Add the fractions and the mixed numbers separately.

Ex.

$$\frac{2}{3} + 1\frac{1}{4}$$

$$\frac{2}{3} \times 4 = \frac{8}{12} \quad \frac{1}{4} \times 3 = \frac{3}{12}$$

$$1 + \frac{2}{3} + \frac{1}{4} = 1 + \frac{8}{12} + \frac{3}{12} = \boxed{1\frac{11}{12}}$$

2) Write the mixed numbers as improper fractions and then add them.

Ex.

$$\frac{2}{3} + 1\frac{1}{4}$$

$$\frac{2}{3} \times 4 = \frac{8}{12}$$

$$1\frac{1}{4} = \frac{4}{4} + \frac{1}{4} = \frac{5}{4} \times 3 = \frac{15}{12}$$

$$\frac{15}{12} + \frac{8}{12} = \frac{23}{12} = \frac{12}{12} + \frac{11}{12} = \boxed{1\frac{11}{12}}$$

Homework: p. 202 # 1-7 odd, 8-11 Bonus 12-13