

Name: Class:

Estimate sums and differences of fractions using benchmarks

Estimate the sums and difference of the following fractions using the benchmarks 0 , $\frac{1}{2}$, or 1

a. $\frac{6}{8} + \frac{1}{4}$ is about _____



b. $\frac{13}{15} + \frac{7}{8}$ is about _____



c. $\frac{43}{45} - \frac{8}{15}$ is about _____

Solution

Name: Class:

Estimate sums and differences of fractions using benchmarks

Estimate the sums and difference of the following fractions using the benchmarks **0**, **$\frac{1}{2}$** , or **1**

a. $\frac{6}{8} + \frac{1}{4}$ is about _____

Since $\frac{1}{4}$ is $\leq \frac{1}{4}$ let's round it to 0

Let's first of all estimate $\frac{6}{8}$

Finally, let's add using the benchmarks

$$1 + 0 = 1$$

Since $\frac{6}{8}$ is $\geq \frac{3}{4}$ let's round it to 1

So, $\frac{6}{8} + \frac{1}{4}$ is about 1

Secondly, let's estimate $\frac{1}{4}$



b. $\frac{13}{15} + \frac{7}{8}$ is about _____

Since $\frac{7}{8}$ is $> \frac{3}{4}$ let's round it to 1

Let's first of all estimate $\frac{13}{15}$

Finally, let's add using the benchmarks

$$1 + 1 = 2$$

Since $\frac{13}{15}$ is $> \frac{3}{4}$ let's round it to 1

So, $\frac{13}{15} + \frac{7}{8}$ is about 2

Secondly, let's estimate $\frac{7}{8}$

c. $\frac{43}{45} - \frac{8}{15}$ is about _____

Since $\frac{8}{15}$ is $> \frac{1}{4}$ and $< \frac{3}{4}$ we round it to a $\frac{1}{2}$

Let's first of all estimate $\frac{43}{45}$

Finally let's subtract the benchmarks

Since $\frac{43}{45}$ is $> \frac{3}{4}$ let's round it to 1

$$1 - \frac{1}{2} = \frac{1}{2}$$

Secondly, let's estimate $\frac{8}{15}$

So, $\frac{43}{45} - \frac{8}{15}$ is about $\frac{1}{2}$

