

5.2

Using Other Models to Add Fractions



Quick Review

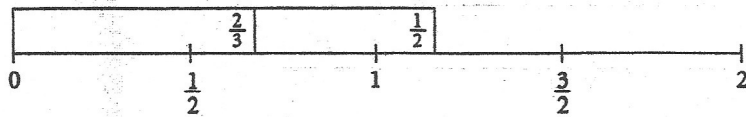
There are many models that help you add fractions.

Circle models are useful when the sum of the fractions is less than 1.

Use fraction strips and a number line when the sum of the fractions is greater than 1.

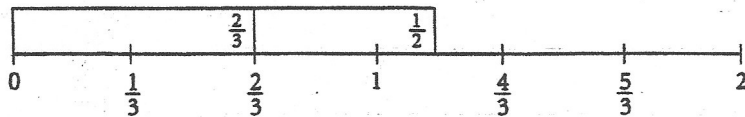
To add $\frac{2}{3} + \frac{1}{2}$, model each fraction with a fraction strip.

Place the fraction strips end-to-end on a number line that shows halves.



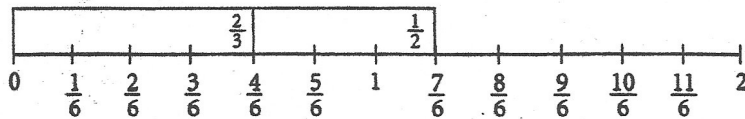
The right end of the strips does not line up with a fraction.

Try using a number line that shows thirds.



The right end of the strips still does not line up with a fraction.

Find a number line that shows sixths.



The right end of the strips lines up with $\frac{7}{6}$.

So, $\frac{2}{3} + \frac{1}{2} = \frac{7}{6}$

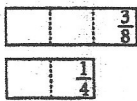
HINT

Look for a number line with a denominator that has both 2 and 3 as factors.



Practice

1. Use fraction strips to add: $\frac{3}{8} + \frac{1}{4}$



$\frac{3}{8} + \frac{1}{4} = \underline{\quad}$

HINT

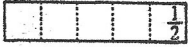
Find an equivalent fraction for $\frac{1}{4}$.



KEY TO SUCCESS

Form a contact circle with 2 classmates in case you miss a class.

2. Use fraction strips to add: $\frac{1}{2} + \frac{1}{5}$



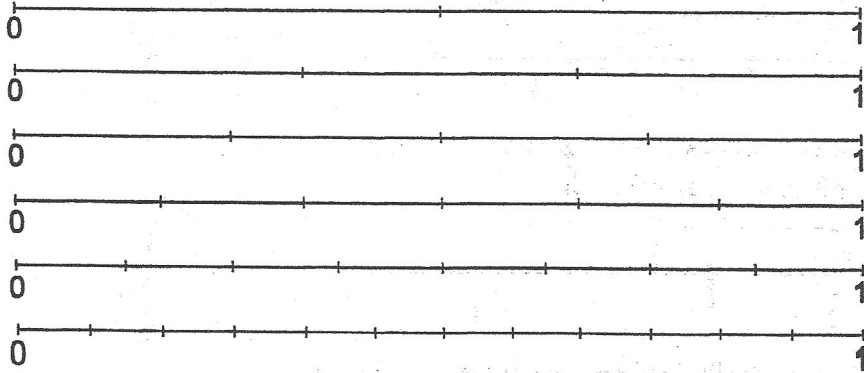
$\frac{1}{2} + \frac{1}{5} =$ _____

3. Use the number lines below.
List fractions equivalent to each fraction.

a) $\frac{1}{2}$ _____

b) $\frac{1}{4}$ _____

c) $\frac{1}{3}$ _____

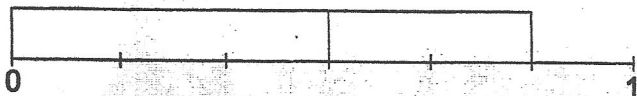


4. Write an addition equation for each picture.

a) _____



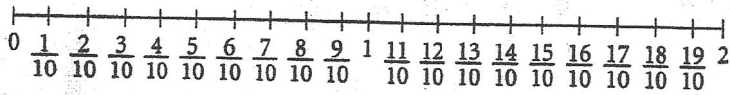
b) _____



c) _____

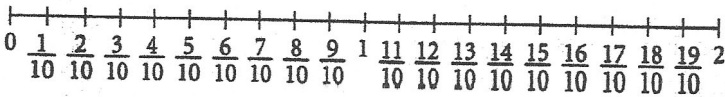
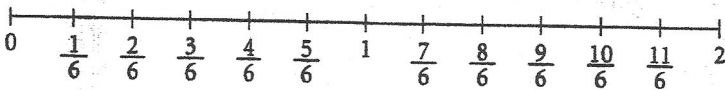
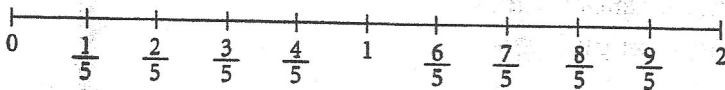
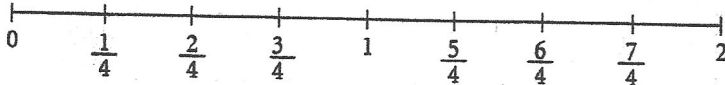


5. Add. Use your fraction strips and a number line like this to help.



$$\frac{3}{5} + \frac{3}{10} = \underline{\quad}$$

6. Use fraction strips and number lines like these to help you add fractions.



a) $\frac{3}{2} + \frac{2}{4} = \underline{\quad}$

b) $\frac{6}{6} + \frac{3}{4} = \underline{\quad}$

c) $\frac{9}{10} + \frac{3}{5} = \underline{\quad}$

7. Add.

a) $\frac{1}{10} + \frac{1}{5} = \underline{\quad}$

b) $\frac{1}{6} + \frac{1}{2} = \underline{\quad}$

c) $\frac{2}{3} + \frac{2}{6} = \underline{\quad}$

d) $\frac{2}{5} + \frac{3}{10} = \underline{\quad}$

Tip
Sketch the
fraction strips.

8. Robert and his brother ordered a pizza. Robert ate $\frac{1}{4}$ of the pizza.

His brother ate $\frac{3}{8}$ of the pizza.

How much pizza was eaten? $\underline{\quad}$

9. Three friends shared a chocolate bar.

Anika ate $\frac{1}{3}$ of the chocolate bar, Ali ate $\frac{1}{6}$, and Augusto ate $\frac{1}{3}$.

a) What fraction of the chocolate bar did Anika and Ali eat? $\underline{\quad}$

b) What fraction of the chocolate bar did the 3 friends eat? $\underline{\quad}$