

G4-M5-Lesson 23

1. Count by 1 fifths. Start at 0 fifths. End at 10 fifths. Circle any fractions that are equivalent to a whole number. Record the whole number below the fraction.

$$\left(\frac{0}{5}\right) \quad \frac{1}{5} \quad \frac{2}{5} \quad \frac{3}{5} \quad \frac{4}{5} \quad \left(\frac{5}{5}\right) \quad \frac{6}{5} \quad \frac{7}{5} \quad \frac{8}{5} \quad \frac{9}{5} \quad \left(\frac{10}{5}\right)$$

$$0 \qquad \qquad \qquad 1 \qquad \qquad \qquad 2$$

I know that 5 fifths equals 1, so 10 fifths equals 2.

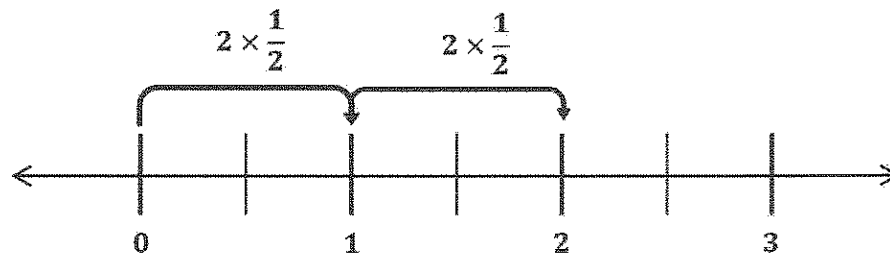
2. Use parentheses to show how to make ones in the following number sentence.

$$\left(\frac{1}{4} + \frac{1}{4} + \frac{1}{4} + \frac{1}{4}\right) + \left(\frac{1}{4} + \frac{1}{4} + \frac{1}{4} + \frac{1}{4}\right) = 2$$

I draw parentheses around groups of 4 fourths because the denominator (fourths) tells me how many unit fractions composed make 1.

3. Multiply. Draw a number line to support your answer.

$$4 \times \frac{1}{2}$$



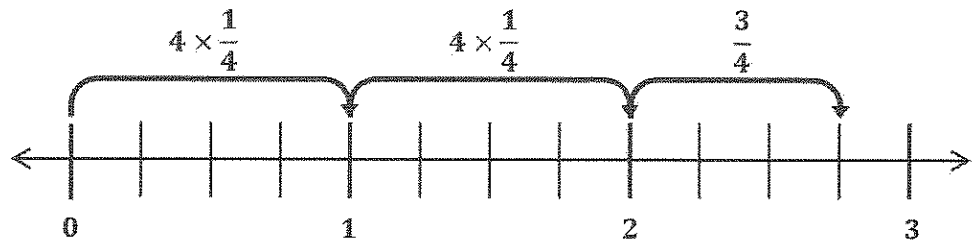
$$4 \times \frac{1}{2} = 2 \times \frac{2}{2} = 2$$

I see on my number line that 4 copies of $\frac{1}{2}$ is the same as 2 copies of $\frac{2}{2}$. Since $\frac{2}{2}$ is the same as 1, I think of 2 copies of $\frac{2}{2}$ as the multiplication sentence, $2 \times 1 = 2$. So, $4 \times \frac{1}{2} = 2$.

4. Multiply. Write the product as a mixed number. Draw a number line to support your answer.

$$11 \times \frac{1}{4}$$

I draw a number line and partition each whole into fourths since the fractional unit that I'm multiplying by is fourths.



$$11 \times \frac{1}{4} = \left(2 \times \frac{4}{4}\right) + \frac{3}{4} = 2 + \frac{3}{4} = 2\frac{3}{4}$$

I can see on my number line that 11 copies of $\frac{1}{4}$ equals 2 copies of $\frac{4}{4}$ plus $\frac{3}{4}$.