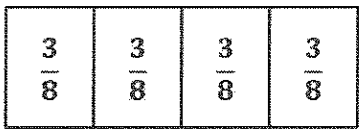
G4-M5-Lesson 36

1. Draw a tape diagram to represent $\frac{3}{8}+\frac{3}{8}+\frac{3}{8}+\frac{3}{8}$.



I model 4 copies of $\frac{3}{8}$.

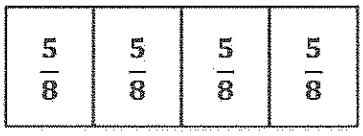
Write a multiplication expression equal to $\frac{3}{8}+\frac{3}{8}+\frac{3}{8}+\frac{3}{8}$.

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

Multiplication is more efficient than addition. I can solve easily by thinking in unit form: 4 × 3 eighths is 12 eighths.

2. Solve using any method. Express your answers as whole or mixed numbers.

a. $4\times\frac{5}{8}$



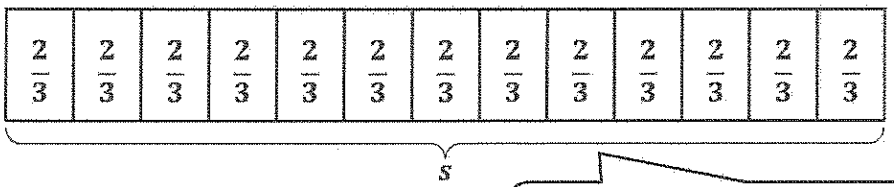
$$4\times\frac{5}{8}=\frac{4\times5}{8}=\frac{20}{8}=2\frac{4}{8}=2\frac{1}{2}$$

b. $32\times\frac{2}{5}$

$$32\times\frac{2}{5}=32\times 2\ \textit{fifths}=64\ \textit{fifths}=\frac{64}{5}=12\frac{4}{5}$$

To solve, I think to myself, 5 times what number is close to or equal to 64? Or, I can divide 64 by 5.

3. A bricklayer places 13 bricks end to end along the entire outside length of a shed's wall. Each brick is $\frac{2}{3}$ foot long. How long is that wall of the shed?



$$13\times\frac{2}{3}=\frac{13\times2}{3}=\frac{26}{3}=8\frac{2}{3}$$

The wall of the shed is $8\frac{2}{3}$ feet long.

It would take too long to write an addition sentence to solve! Multiplication is quick and easy!