

Activity 16 Assessment

Multiplying Natural Numbers by Proper Fractions

Multiplication with Proper Fractions

Models multiplication situations concretely and pictorially.

$$4 \times \frac{3}{5} = ?$$



"I modelled the multiplication with fraction strips, then counted fifths:

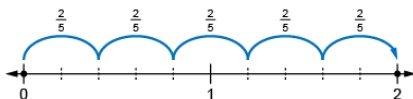
$$4 \times \frac{3}{5} = \frac{12}{5}, \text{ or } 2\frac{2}{5}$$

(« J'ai modélisé la multiplication avec des bandes de fractions, puis j'ai compté les cinquièmes :

$$4 \times \frac{3}{5} = \frac{12}{5}, \text{ ou } 2\frac{2}{5} . »)$$

Uses models and think-addition strategies, to solve multiplication problems.

$$5 \times \frac{2}{5} = ?$$



"I know that multiplication is like repeated addition, so I used a number with each whole partitioned into fifths, then took

$$5 \text{ jumps of two-fifths: } 5 \times \frac{2}{5} = 2"$$

(« Je sais que la multiplication est comme une addition répétée, j'ai donc utilisé un nombre dont chaque tout est divisé en cinquièmes, puis j'ai fait 5 sauts de deux cinquièmes :

$$5 \times \frac{2}{5} = 2 . »)$$

Relates multiplication of a natural number by a unit fraction to division.

$$4 \times \frac{1}{5} = 4 \div 5$$

Flexibly solves multiplication problems.

$$\begin{aligned} 5 \times \frac{3}{4} &= \frac{5 \times 3}{4} \\ &= \frac{15}{4} \\ &= 3\frac{3}{4} \end{aligned}$$

Observations/Documentation