Fractions (2)

Lesson sequence

- Multiply a unit fraction by an integer
- Multiply a non-unit fraction by an integer
- Multiply a mixed number by an integer
- Calculate fraction of a quantity
- Fraction of an amount
- Find the whole
- Use fractions as operators

Vocabulary

- *Multiply*
- *Denominator*
- *Numerator*
- *Whole*
- *Part*
- *Fraction*
- *Quantity*
- *Integer*
- *Mixed fraction*
- *Improper fraction*
- *Equal*
- *Divide*
- *Unit fraction*
- *Non-unit fraction*

Sticky learning

New Knowledge

- *Know what are unit and non-unit fractions*
- *Know what an integer is*

New Skills

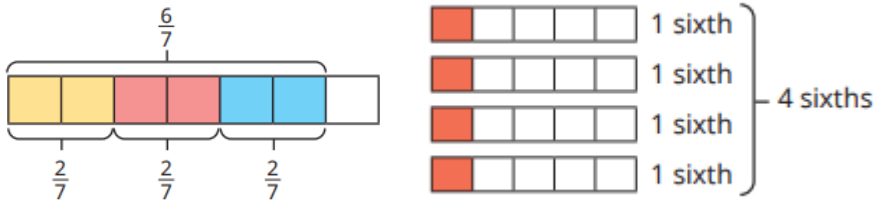
- *To multiply proper fractions and mixed numbers by whole numbers, supported by materials and diagrams*
- *To calculate a fraction of a quantity or amount*
- *Be able to solve word problems in relations to multiplying fractions and fractions of an amount*

Concept Links/Prior Knowledge

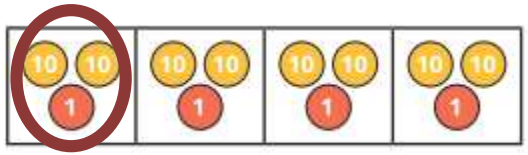
- *To add and subtract fractions with the same denominator and multiples of the same number*
- *To convert mixed numbers and improper fractions from one form to the other and write mathematical statements > 1 as a mixed number (e.g. $^{2}/_{5} + {}^{4}/_{5} = {}^{6}/_{5} = 1\,{}^{1}/_{5}$)*
- *Simplifying fractions*

Pictorial representations

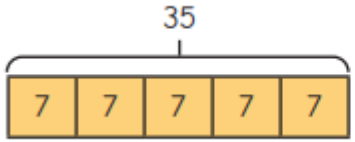
Multiplying fractions by an integer



Fraction of an amount



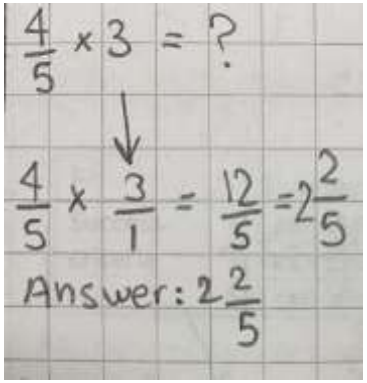
$\frac{1}{4}$ of 84



$35 \div 5 = 7$

$\frac{1}{5}$ of $35 = 7$

Abstract Representations



Multiplying fractions by an integer

What is $^{5}/_{12}$ of 96?

Step 1: Divide by the bottom...

96 ÷ 12 = 8

Step 2: ...and times by the top.

8 x 5 = 40

$^{5}/_{12}$ **of 96** is *40*

Fractions of an amount