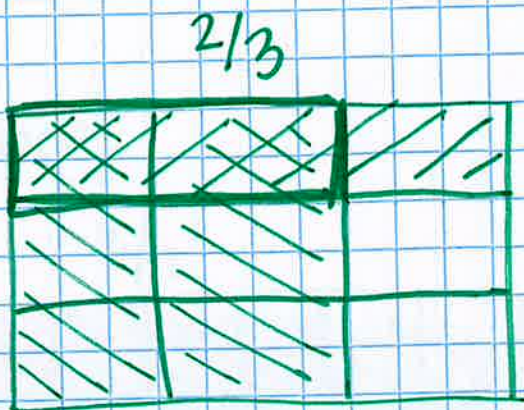


an apply an algorithm to multiply mixed fractions.

EX

$$\frac{2}{3} \cdot \frac{1}{3} = \frac{2}{9}$$

 $\frac{1}{3}$ 

\* short cut: multiply straight across

2-96

$$a) \frac{7}{8} \cdot \frac{5}{6} = \frac{35}{48}$$

$$b) \frac{2}{13} \cdot \frac{4}{5} = \frac{8}{65}$$

$$c) \frac{6}{7} \cdot \frac{6}{7} = \frac{36}{49}$$

$$d) \frac{4}{7} \cdot \frac{3}{8} = \frac{12}{56}$$

$$e) \frac{6}{11} \cdot \frac{1}{2} = \frac{6}{22}$$

$$f) \frac{8}{3} \cdot \frac{9}{14} = \frac{72}{42} = 1\frac{20}{42}$$

EX

$$2\frac{3}{5} \cdot 3 =$$

$$39 - 35 = 4$$

$$\frac{13}{5} \cdot \frac{3}{1} = \frac{39}{5} = 7\frac{4}{5}$$



Mixed numbers  $\rightarrow$  improper fraction

$$2\frac{1}{2}$$

Diagram showing the conversion of the mixed number  $2\frac{1}{2}$  to an improper fraction. An arrow points from the whole number 2 to the numerator 1, with a plus sign above it. Another arrow points from the denominator 2 to the denominator of the fraction part, with an 'x' below it.



$$\frac{5}{2}$$

① denominator  $\cdot$  whole #

② add the numerator

③ keep the denominator

new numerator

**2-101**

a)  $1\frac{1}{3} \cdot 1\frac{1}{2} = \frac{4}{3} \cdot \frac{3}{2} = \frac{12}{6} = 2$

Diagram showing the multiplication of  $1\frac{1}{3}$  and  $1\frac{1}{2}$ . For  $1\frac{1}{3}$ , an arrow points from 1 to the numerator 1 with a plus sign, and another arrow points from the denominator 3 to the denominator of the fraction part with an 'x'. For  $1\frac{1}{2}$ , an arrow points from 1 to the numerator 1 with a plus sign, and another arrow points from the denominator 2 to the denominator of the fraction part with an 'x'.

b)  $3\frac{1}{3} \cdot 2\frac{1}{2} = \frac{10}{3} \cdot \frac{5}{2} =$

Diagram showing the multiplication of  $3\frac{1}{3}$  and  $2\frac{1}{2}$ . For  $3\frac{1}{3}$ , an arrow points from 3 to the numerator 1 with a plus sign, and another arrow points from the denominator 3 to the denominator of the fraction part with an 'x'. For  $2\frac{1}{2}$ , an arrow points from 2 to the numerator 1 with a plus sign, and another arrow points from the denominator 2 to the denominator of the fraction part with an 'x'.