



# Timester Challenge

## Multiply and Dividing Fractions



Work out  $\frac{2}{7} \times \frac{3}{4}$ .

Give your answer in it's simplest form.

Bronze ★

Work out  $\frac{3}{5} \div \frac{5}{9}$

Give your answer in it's simplest form.

Bronze ★

Work out

$$1\frac{3}{7} \times 2\frac{4}{5}$$

Give your answer as a mixed number in it's simplest form.

Bronze ★

Calculate

$$3\frac{1}{3} \div 2\frac{3}{5}$$

Give your answer as a mixed number in its lowest terms.

Silver ★

Frank worked out  $2\frac{1}{4} \times 3\frac{1}{2}$ .

He wrote:

$$2 \times 3 = 6 \text{ and } \frac{1}{4} \times \frac{1}{2} = \frac{1}{8}$$

$$\text{So } 2\frac{1}{4} \times 3\frac{1}{2} = 6\frac{1}{8}$$

The answer of  $6\frac{1}{8}$  is wrong.

Describe one mistake Frank made.

Silver ★

Write the numbers 2, 3, 4 and 5 in the boxes to give the greatest possible total. You may only write each number once.

a)

$$\boxed{\phantom{0}} \frac{\boxed{\phantom{0}}}{8} \times \boxed{\phantom{0}} \frac{1}{\boxed{\phantom{0}}}$$

b)

$$\boxed{\phantom{0}} \frac{\boxed{\phantom{0}}}{8} \div \boxed{\phantom{0}} \frac{1}{\boxed{\phantom{0}}}$$

Gold ★



# Timester Challenge

## Multiply and Dividing Fractions

### Answers



Work out  $\frac{2}{7} \times \frac{3}{4}$ .

Give your answer in it's simplest form.

$$\frac{2 \times 3}{7 \times 4} = \frac{6}{28} = \frac{3}{14}$$

Bronze ★

Work out  $\frac{3}{5} \div \frac{5}{9}$

Give your answer in it's simplest form.

$$\frac{3}{5} \times \frac{9}{5} = \frac{27}{25} = 1 \frac{2}{25}$$

Bronze ★

Work out

$$1 \frac{3}{7} \times 2 \frac{4}{5}$$

Give your answer as a mixed number in it's simplest form.

$$\frac{10}{7} \times \frac{14}{5} = \frac{140}{35} = 4$$

Bronze ★

Calculate

$$3 \frac{1}{3} \div 2 \frac{3}{5}$$

Give your answer as a mixed number in its lowest terms.

$$\frac{10}{3} \div \frac{13}{5} = \frac{10}{3} \times \frac{5}{13} = \frac{50}{39} = 1 \frac{11}{39}$$

Silver ★

Frank worked out  $2 \frac{1}{4} \times 3 \frac{1}{2}$ .

He wrote:  $2 \times 3 = 6$  and  $\frac{1}{4} \times \frac{1}{2} = \frac{1}{8}$

So  $2 \frac{1}{4} \times 3 \frac{1}{2} = 6 \frac{1}{8}$  The answer of  $6 \frac{1}{8}$  is wrong.

Describe one mistake Frank made.

He forgot to multiply every term together. E.g.  $2 \times \frac{1}{2}$ ,  $3 \times \frac{1}{4}$

It is easier to convert to an improper (top heavy) fraction first.

Silver ★

Write the numbers 2, 3, 4 and 5 in the boxes to give the greatest possible total. You may only write each number once.

a)

$$\boxed{5} \frac{\boxed{3}}{8} \times \boxed{4} \frac{\boxed{1}}{\boxed{2}}$$

b)

$$\boxed{5} \frac{\boxed{3}}{8} \div \boxed{2} \frac{\boxed{1}}{\boxed{4}}$$

Gold ★