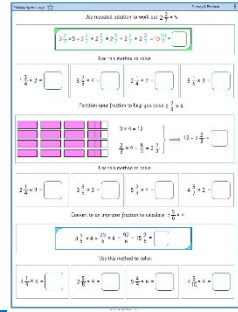


★ Multiply by an Integer

Children use their knowledge of fractions to multiply a mixed number by a whole number. They use the method of repeated addition, multiplying the whole and part separately and the method of converting to an improper fraction then multiplying.

On this sheet, they will use visual representations such as the bar model.

masterthecurriculum.co.uk

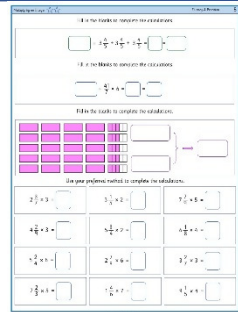


★★ Multiply by an Integer

Children use their knowledge of fractions to multiply a mixed number by a whole number. They use the method of repeated addition, multiplying the whole and part separately and the method of converting to an improper fraction then multiplying.

On this sheet, they will continue to explore visual representations such as the bar model and complete missing parts to calculations.

masterthecurriculum.co.uk

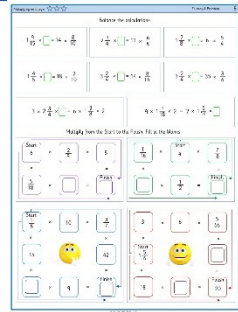


★★★ Multiply by an Integer

Children use their knowledge of fractions to multiply a mixed number by a whole number. They use the method of repeated addition, multiplying the whole and part separately and the method of converting to an improper fraction then multiplying.

On this sheet, they will solve multi-step questions that involve multiplying the fraction by an integer.

masterthecurriculum.co.uk



Reasoning & Problem Solving

Multiply by an Integer

Children continue working on their understanding of multiplying fractions by an integer.

They can show their understanding by solving reasoning tasks.

Multiply by an Integer Reasoning & Problem Solving 5

Work out the missing numbers.

$$2 \frac{2}{3} \times \square = 10 \frac{\square}{3}$$

$$4 \frac{\square}{4} \times \square = 12 \frac{\square}{4}$$

$$\square \frac{2}{3} \times 5 = 8 \frac{\square}{3}$$

Zach runs $2 \frac{2}{3}$ miles four times per week.

Rosie runs $3 \frac{1}{3}$ miles three times per week.

Who runs the furthest during the week? Explain why.

Use repeated addition to work out $2\frac{2}{7} \times 5$

$$2\frac{2}{7} \times 5 = 2\frac{2}{7} + 2\frac{2}{7} + 2\frac{2}{7} + 2\frac{2}{7} + 2\frac{2}{7} = 10\frac{10}{7} = \boxed{}$$

Use this method to solve:

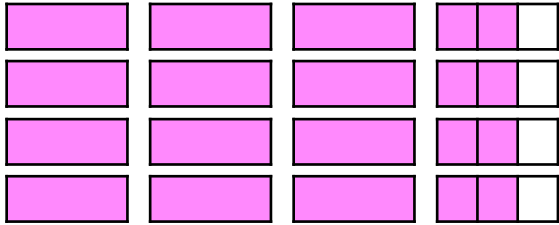
$1\frac{3}{4} \times 2 = \boxed{}$

$3\frac{2}{5} \times 4 = \boxed{}$

$2\frac{1}{4} \times 7 = \boxed{}$

$5\frac{1}{6} \times 3 = \boxed{}$

Partition your fraction to help you solve $3\frac{2}{3} \times 4$



$3 \times 4 = 12$

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

$\left. \begin{array}{l} 3 \times 4 = 12 \\ \frac{2}{3} \times 4 = \frac{8}{3} = 2\frac{2}{3} \end{array} \right\} \rightarrow 12 + 2\frac{2}{3} = \boxed{}$

Use this method to solve:

$2\frac{1}{4} \times 3 = \boxed{}$

$3\frac{3}{5} \times 3 = \boxed{}$

$5\frac{2}{3} \times 4 = \boxed{}$

$4\frac{5}{7} \times 2 = \boxed{}$

Convert to an improper fraction to calculate $3\frac{5}{6} \times 4$

$$3\frac{5}{6} \times 4 = \frac{23}{6} \times 4 = \frac{92}{6} = 15\frac{2}{6} = \boxed{}$$

Use this method to solve:

$3\frac{1}{4} \times 5 = \boxed{}$

$2\frac{5}{8} \times 4 = \boxed{}$

$5\frac{4}{9} \times 6 = \boxed{}$

$4\frac{3}{10} \times 4 = \boxed{}$



Use repeated addition to work out $2\frac{2}{7} \times 5$

$$2\frac{2}{7} \times 5 = 2\frac{2}{7} + 2\frac{2}{7} + 2\frac{2}{7} + 2\frac{2}{7} + 2\frac{2}{7} = 10\frac{10}{7} = 11\frac{3}{7}$$

Use this method to solve:

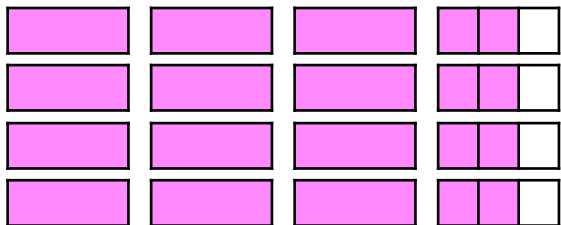
$$1\frac{3}{4} \times 2 = 3\frac{1}{2}$$

$$3\frac{2}{5} \times 4 = 13\frac{3}{5}$$

$$2\frac{1}{4} \times 7 = 15\frac{3}{4}$$

$$5\frac{1}{6} \times 3 = 15\frac{1}{2}$$

Partition your fraction to help you solve $3\frac{2}{3} \times 4$



$$3 \times 4 = 12$$

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

$$12 + 2\frac{2}{3} = 14\frac{2}{3}$$

Use this method to solve:

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

$$3\frac{3}{5} \times 3 = 10\frac{4}{5}$$

$$5\frac{2}{3} \times 4 = 22\frac{2}{3}$$

$$4\frac{5}{7} \times 2 = 9\frac{3}{7}$$

Convert to an improper fraction to calculate $3\frac{5}{6} \times 4$

$$3\frac{5}{6} \times 4 = \frac{23}{6} \times 4 = \frac{92}{6} = 15\frac{2}{6} = 15\frac{1}{3}$$

Use this method to solve:

$$3\frac{1}{4} \times 5 = 16\frac{1}{4}$$

$$2\frac{5}{8} \times 4 = 10\frac{1}{2}$$

$$5\frac{4}{9} \times 6 = 32\frac{2}{3}$$

$$4\frac{3}{10} \times 4 = 17\frac{1}{5}$$



Fill in the blanks to complete the calculations.

$$\boxed{} = 3\frac{4}{5} + 3\frac{4}{5} + 3\frac{4}{5} = \boxed{} = \boxed{}$$

Fill in the blanks to complete the calculations.

$$\boxed{} = \frac{41}{7} \times 6 = \boxed{} = \boxed{}$$

Fill in the blanks to complete the calculations.

Use your preferred method to complete the calculations.

$$2\frac{3}{7} \times 3 = \boxed{}$$

$$3\frac{1}{5} \times 2 = \boxed{}$$

$$7\frac{7}{9} \times 5 = \boxed{}$$

$$4\frac{2}{9} \times 3 = \boxed{}$$

$$5\frac{3}{4} \times 2 = \boxed{}$$

$$6\frac{1}{8} \times 4 = \boxed{}$$

$$5\frac{2}{4} \times 6 = \boxed{}$$

$$2\frac{7}{9} \times 6 = \boxed{}$$

$$3\frac{2}{7} \times 3 = \boxed{}$$

$$7\frac{2}{3} \times 5 = \boxed{}$$

$$1\frac{4}{6} \times 7 = \boxed{}$$

$$9\frac{1}{5} \times 4 = \boxed{}$$



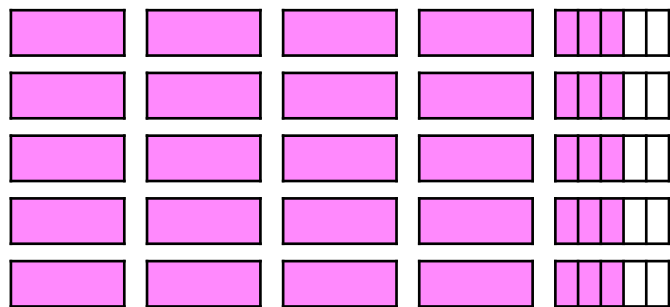
Fill in the blanks to complete the calculations.

$$3\frac{4}{5} \times 3 = 3\frac{4}{5} + 3\frac{4}{5} + 3\frac{4}{5} = 9\frac{12}{5} = 11\frac{2}{5}$$

Fill in the blanks to complete the calculations.

$$5\frac{6}{7} \times 6 = \frac{41}{7} \times 6 = \frac{246}{7} = 35\frac{1}{7}$$

Fill in the blanks to complete the calculations.



$$4 \times 5 = 20$$

$$\frac{3}{5} \times 5 = \frac{15}{5} = 3$$

$$20 + 3 = 23$$

Use your preferred method to complete the calculations.

$$2\frac{3}{7} \times 3 = 7\frac{2}{7}$$

$$3\frac{1}{5} \times 2 = 6\frac{2}{5}$$

$$7\frac{7}{9} \times 5 = 38\frac{8}{9}$$

$$4\frac{2}{9} \times 3 = 12\frac{2}{3}$$

$$5\frac{3}{4} \times 2 = 11\frac{1}{2}$$

$$6\frac{1}{8} \times 4 = 24\frac{1}{2}$$

$$5\frac{2}{4} \times 6 = 33$$

$$2\frac{7}{9} \times 6 = 16\frac{2}{3}$$

$$3\frac{2}{7} \times 3 = 9\frac{6}{7}$$

$$7\frac{2}{3} \times 5 = 38\frac{1}{3}$$

$$1\frac{4}{6} \times 7 = 11\frac{2}{3}$$

$$9\frac{1}{5} \times 4 = 36\frac{4}{5}$$



Balance the calculations.

$$1\frac{9}{15} \times \square = 14 \times \frac{8}{10}$$

$$2\frac{3}{4} \times \square = 11 \times \frac{6}{8}$$

$$1\frac{7}{8} \times \square = 6 \times \frac{5}{4}$$

$$1\frac{4}{5} \times \square = 18 \times \frac{2}{10}$$

$$3\frac{2}{4} \times \square = 14 \times \frac{8}{16}$$

$$3\frac{2}{4} \times \square = 35 \times \frac{3}{6}$$


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


$$9 \times 1\frac{1}{18} \times 2 = 2 \times 1\frac{5}{14} \times \square$$

Multiply from the Start to the Finish. Fill in the blanks.

Start 6 × $\frac{2}{9}$ × 5 = $\frac{5}{18}$ × = Finish

$\frac{1}{16}$ × Start 4 × $\frac{7}{8}$ = × $\frac{1}{2}$ = Finish

Start $\frac{1}{5}$ × 10 × $\frac{3}{7}$ = 15 ×  42 = × 9 = Finish

3 × 6 × $\frac{5}{66}$ = Start $1\frac{5}{6}$ ×  = 18 × = Finish 20



Balance the calculations.

$$1\frac{9}{15} \times \boxed{7} = 14 \times \frac{8}{10}$$

$$2\frac{3}{4} \times \boxed{3} = 11 \times \frac{6}{8}$$

$$1\frac{7}{8} \times \boxed{4} = 6 \times \frac{5}{4}$$

$$1\frac{4}{5} \times \boxed{2} = 18 \times \frac{2}{10}$$

$$3\frac{2}{4} \times \boxed{2} = 14 \times \frac{8}{16}$$

$$3\frac{2}{4} \times \boxed{5} = 35 \times \frac{3}{6}$$


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


$$9 \times 1\frac{1}{18} \times 2 = 2 \times 1\frac{5}{14} \times \boxed{7}$$

Multiply from the Start to the Finish. Fill in the blanks.

Start 6 × $\frac{2}{9}$ × 5 = $\frac{5}{18}$ × $\boxed{4}$ = Finish $6\frac{2}{3}$

$\frac{1}{16}$ × Start 4 × $\frac{7}{8}$ = $\boxed{28}$ × $\frac{1}{2}$ = Finish $3\frac{1}{2}$

Start $\frac{1}{5}$ × 10 × $\frac{3}{7}$ = 15 ×  42 = $\frac{4}{3}$ × 9 = Finish 36

$\boxed{3}$ × 6 × $\frac{5}{66}$ = Start $1\frac{5}{6}$ ×  $\boxed{8}$ = $\boxed{18}$ × $\frac{20}{33}$ = Finish 20

Work out the missing numbers.

$$\boxed{2} \frac{\boxed{2}}{\boxed{3}} \times \boxed{} = \boxed{10} \frac{\boxed{}}{\boxed{3}}$$

$$\boxed{4} \frac{\boxed{}}{\boxed{4}} \times \boxed{} = \boxed{12} \frac{\boxed{}}{\boxed{4}}$$

$$\boxed{} \frac{\boxed{2}}{\boxed{3}} \times \boxed{5} = \boxed{8} \frac{\boxed{}}{\boxed{3}}$$

masterthecurriculum.co.uk

Zach runs $2\frac{2}{3}$ miles
four times
per week.



Rosie runs $3\frac{1}{4}$ miles
three times
per week.

Who runs the furthest during the week?
Explain why.

Work out the missing numbers.

$$\boxed{2} \frac{\boxed{2}}{\boxed{3}} \times \boxed{} = \boxed{10} \frac{\boxed{}}{\boxed{3}}$$

$$\boxed{4} \frac{\boxed{}}{\boxed{4}} \times \boxed{} = \boxed{12} \frac{\boxed{}}{\boxed{4}}$$

$$\boxed{} \frac{\boxed{2}}{\boxed{3}} \times \boxed{5} = \boxed{8} \frac{\boxed{}}{\boxed{3}}$$

masterthecurriculum.co.uk

Zach runs $2\frac{2}{3}$ miles
four times
per week.



Rosie runs $3\frac{1}{4}$ miles
three times
per week.

Who runs the furthest during the week?
Explain why.

Work out the missing numbers.

$$2 \frac{2}{3} \times 4 = 10 \frac{2}{3}$$

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

$$1 \frac{2}{3} \times 5 = 8 \frac{1}{3}$$

Zach runs $2\frac{2}{3}$ miles
four times
per week.



Rosie runs $3\frac{1}{4}$ miles
three times
per week.



Zach runs $2\frac{2}{3} \times 4 = 10\frac{2}{3}$ miles.

Rosie runs $3\frac{1}{4} \times 3 = 9\frac{3}{4}$ miles.

Zach runs further than Rosie.

Work out the missing numbers.

$$2 \frac{2}{3} \times 4 = 10 \frac{2}{3}$$

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

$$1 \frac{2}{3} \times 5 = 8 \frac{1}{3}$$

Zach runs $2\frac{2}{3}$ miles
four times
per week.



Rosie runs $3\frac{1}{4}$ miles
three times
per week.



Zach runs $2\frac{2}{3} \times 4 = 10\frac{2}{3}$ miles.

Rosie runs $3\frac{1}{4} \times 3 = 9\frac{3}{4}$ miles.

Zach runs further than Rosie.