Maths Day 1 - Starter

1. 1,2,3,6,13,26,39,78	**2.** 1,2,3,6,7,14,21,42	**3.** Factors of 29	**4.** 1,2,5,7,10,14,35,70	**5.** 1,3,7,9,21,63
6. 1,29	**7.** Factors of 78	**8.** 1,5,7,35	**9.** Factors of 63	**10.** 1,2,31,62
11. Factors of 77	**12.** 1,7,11,77	**13.** Factors of 52	**14.** 1,2,4,13,26,52	**15.** Factors of 62
16. Factors of 35	**17.** 1,2,4,7,8,14,28,56	**18.** Factors of 42	**19.** Factors of 56	**20.** Factors of 70

Maths Day 1 – Multiplying Fractions by Integers

Video Link: https://vimeo.com/475426110

Slide 3 is pitched at *

Slide 5 is pitched at **/***

Remember to send any work or queries to njs.year6@taw.org.uk for some teacher feedback.

Use bar models to help you.

a) $\dfrac{1}{5} + \dfrac{1}{5} + \dfrac{1}{5} = \boxed{}$ $3 \times \dfrac{1}{5} = \boxed{}$

b) $\dfrac{1}{7} + \dfrac{1}{7} + \dfrac{1}{7} + \dfrac{1}{7} = \boxed{}$ $4 \times \dfrac{1}{7} = \boxed{}$

c) $\dfrac{1}{8} + \dfrac{1}{8} + \dfrac{1}{8} + \dfrac{1}{8} + \dfrac{1}{8} = \boxed{}$ $5 \times \dfrac{1}{8} = \boxed{}$

d) $\dfrac{1}{10} + \dfrac{1}{10} + \dfrac{1}{10} + \dfrac{1}{10} + \dfrac{1}{10} + \dfrac{1}{10} + \dfrac{1}{10} = \boxed{}$ $7 \times \dfrac{1}{10} = \boxed{}$

2 Complete the multiplications.

a) $3 \times \dfrac{1}{8} = \boxed{}$ e) $\dfrac{1}{5} \times 4 = \boxed{}$

b) $3 \times \dfrac{1}{10} = \boxed{}$ f) $\dfrac{1}{9} \times 8 = \boxed{}$

c) $\dfrac{1}{8} \times 5 = \boxed{}$ g) $8 \times \dfrac{1}{11} = \boxed{}$

d) $9 \times \dfrac{1}{10} = \boxed{}$ h) $\dfrac{1}{11} \times 10 = \boxed{}$

$\dfrac{1}{3} + \dfrac{1}{3}$	$2 \times \dfrac{1}{5}$
$\dfrac{1}{5} + \dfrac{1}{5} + \dfrac{1}{5}$	$\dfrac{1}{4} \times 3$
$\dfrac{1}{5} + \dfrac{1}{5}$	$3 \times \dfrac{1}{5}$
$\dfrac{1}{4} + \dfrac{1}{4} + \dfrac{1}{4}$	$2 \times \dfrac{1}{3}$

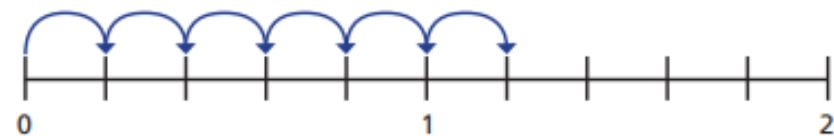**4** A pizza is cut into sixths.

Jack eats five of the slices.

Write a multiplication to represent this.

5 Complete the multiplications.

Use the number lines to help you.

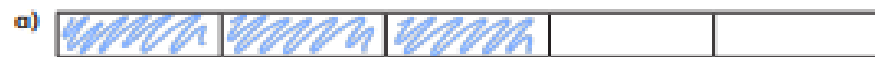Give each answer as an improper fraction and as a mixed number.

a)

0   1   2

$6 \times \dfrac{1}{5} = \boxed{} = \boxed{}$

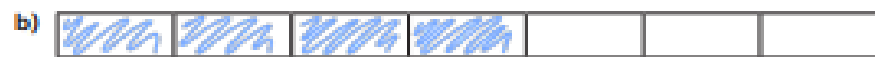# Multiply unit fractions by an integer

1 Complete the calculations.

Use the bar models to help you.

a)

$$\frac{1}{5} + \frac{1}{5} + \frac{1}{5} = \boxed{\frac{3}{5}}$$

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

b)

$$\frac{1}{7} + \frac{1}{7} + \frac{1}{7} + \frac{1}{7} = \boxed{\frac{4}{7}}$$

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

c)

$$\frac{1}{8} + \frac{1}{8} + \frac{1}{8} + \frac{1}{8} + \frac{1}{8} = \boxed{\frac{5}{8}}$$

$$5 \times \frac{1}{8} = \boxed{\frac{5}{8}}$$

d)

$$\frac{1}{10} + \frac{1}{10} + \frac{1}{10} + \frac{1}{10} + \frac{1}{10} + \frac{1}{10} + \frac{1}{10} = \boxed{\frac{7}{10}}$$

$$7 \times \frac{1}{10} = \boxed{\frac{7}{10}}$$

2 Complete the multiplications.

a) $3 \times \frac{1}{8} = \boxed{\frac{3}{8}}$

b) $3 \times \frac{1}{10} = \boxed{\frac{3}{10}}$

c) $\frac{1}{8} \times 5 = \boxed{\frac{5}{8}}$

d) $9 \times \frac{1}{10} = \boxed{\frac{9}{10}}$

e) $\frac{1}{5} \times 4 = \boxed{\frac{4}{5}}$

f) $\frac{1}{9} \times 8 = \boxed{\frac{8}{9}}$

g) $8 \times \frac{1}{11} = \boxed{\frac{8}{11}}$

h) $\frac{1}{11} \times 10 = \boxed{\frac{10}{11}}$

3 Match the addition to the equivalent multiplication.

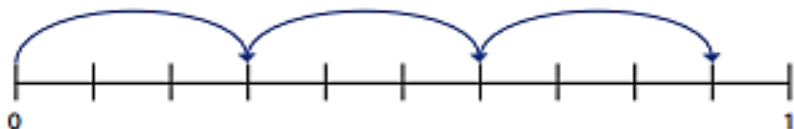| $\frac{1}{3} + \frac{1}{3}$		$2 \times \frac{1}{5}$
$\frac{1}{5} + \frac{1}{5} + \frac{1}{5}$		$\frac{1}{4} \times 3$
$\frac{1}{5} + \frac{1}{5}$		$3 \times \frac{1}{5}$
$\frac{1}{4} + \frac{1}{4} + \frac{1}{4}$		$2 \times \frac{1}{3}$

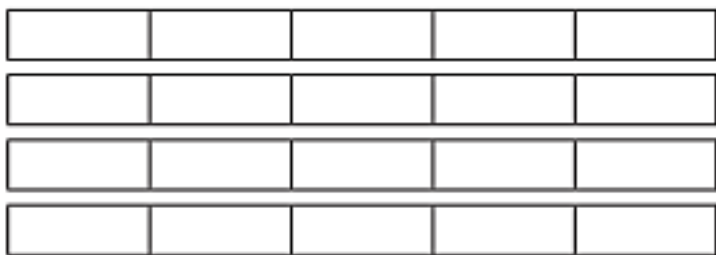**1** Complete the calculations.

a)

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

b)

0   1

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

2 a) Shade the bar models to show $\frac{2}{5} \times 4$

b) Work out the multiplication.

$\frac{2}{5} \times 4$

3 Complete the calculations.

a) $\frac{1}{3} \times 1$ $\frac{1}{3} \times 2$ $\frac{1}{3} \times 3$

$\frac{1}{3} \times 4$ $\frac{1}{3} \times 5$ $\frac{1}{3} \times 6$

b) $\frac{3}{4} \times 1$ $\frac{3}{4} \times 2$ $\frac{3}{4} \times 3$

$\frac{3}{4} \times 4$ $\frac{3}{4} \times 5$ $\frac{3}{4} \times 6$

What patterns do you notice?

4 Complete the multiplication.

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

What method did you use? Is there a different method you could have used?

6 Write each answer as a mixed number in its simplest form.

a) $1\frac{1}{5} \times 2$ d) $2\frac{2}{5} \times 5$

b) $2\frac{1}{6} \times 3$ e) $7 \times 3\frac{1}{2}$

c) $2\frac{2}{5} \times 4$ f) $\frac{11}{15} \times 7$

White Rose Maths

1 Complete the calculations.

a)

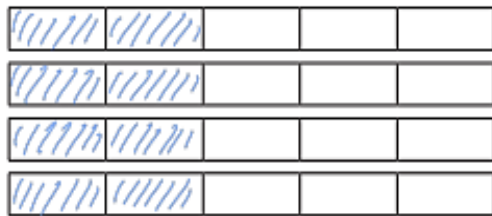$\frac{2}{7} \times 2 = \boxed{\frac{4}{7}}$

b)

0   1

$3 \times \frac{3}{10} = \boxed{\frac{9}{10}}$

2 a) Shade the bar models to show $\frac{2}{5} \times 4$

b) Complete the multiplication.

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

3 Complete the calculations.

a) $\frac{1}{3} \times 1 = \boxed{\frac{1}{3}}$ b) $\frac{3}{4} \times 1 = \boxed{\frac{3}{4}}$

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

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

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

$\frac{1}{3} \times 5 = \boxed{1\frac{2}{3}}$ $\frac{3}{4} \times 5 = \boxed{3\frac{3}{4}}$
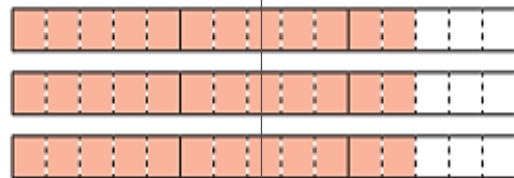
$\frac{1}{3} \times 6 = \boxed{2}$ $\frac{3}{4} \times 6 = \boxed{4\frac{1}{2}}$

What patterns do you notice?

4 Complete the multiplication.

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

What method did you use? Is there a different method you could have used?

6 Write each answer as a mixed number in its simplest form.

a) $1\frac{1}{5} \times 2 = \boxed{2\frac{2}{5}}$ d) $2\frac{2}{5} \times 5 = \boxed{12}$

b) $2\frac{1}{6} \times 3 = \boxed{6\frac{1}{2}}$ e) $7 \times 3\frac{1}{2} = \boxed{24\frac{1}{2}}$

c) $2\frac{2}{5} \times 4 = \boxed{9\frac{3}{5}}$ f) $\frac{11}{15} \times 7 = \boxed{5\frac{2}{15}}$
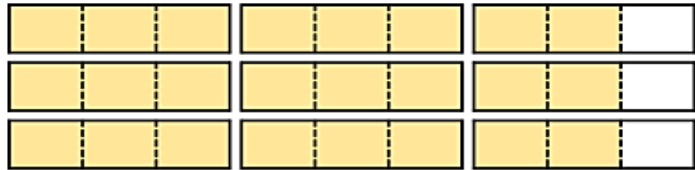
Fancy a bit of extra maths?

Flashback 4

CCCXXVII

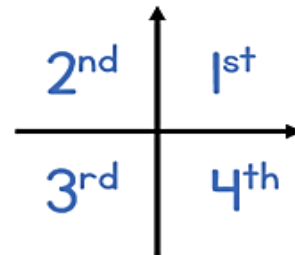1) Multiply $2\frac{2}{3}$ by 3   8

2) What is $\frac{1}{2} + \frac{1}{3}$? $\frac{5}{6}$
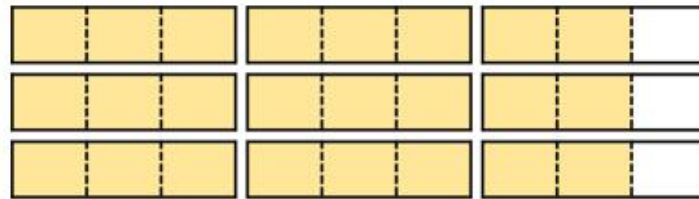
3) Calculate $100 - 2 \times (18 + 2)$ 60

4) Which quadrant is $(-5, -5)$ in?

3rd

2nd	1st
3rd	4th

White Rose Maths