

Year 6

Monday 11th May 2020

Maths

LO: to multiply fractions by integers

Please note: there is no lesson on Zoom today as the teachers are in school. We recommended that you watch the video of the lesson using the link below.

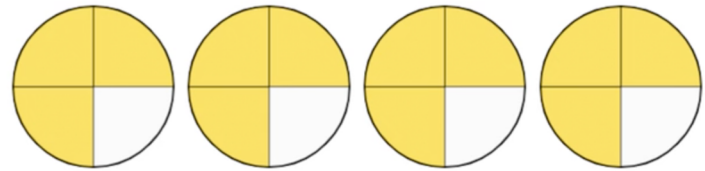
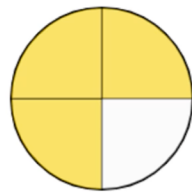
Please note: this link only works on either pdf or the link above this powerpoint.
The video lesson is available here – Summer Term - Week 4 - lesson 1



Today we are revising how to multiply fractions by **integers**. An **integer** is another way of saying a whole number. For example 1, 2 and 3 are all **integers**. 0.5, 3/5th and 2.75 are not.

For example:

Each person gets 3 quarters of a cake.

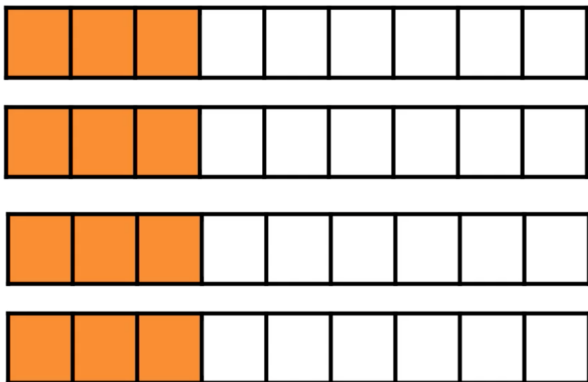


If there are 4 people, how much cake will be needed?

$$3 \text{ quarters} \times 4 = 12 \text{ quarters}$$

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

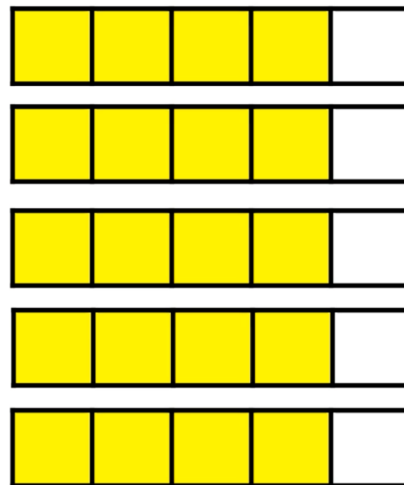
1:



$$3 \text{ ninths} \times 4 = \boxed{} \text{ ninths}$$

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

2:



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

Here are the answers for 1 and 2. Can you fill in the blanks for questions 3 and 4?


Answer 1:

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

3:

$$\frac{3}{12} \times 5 = \frac{\boxed{}}{12}$$

Answer 2:

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


4:

$$\frac{3}{12} \times \boxed{} = \frac{30}{12}$$

5:

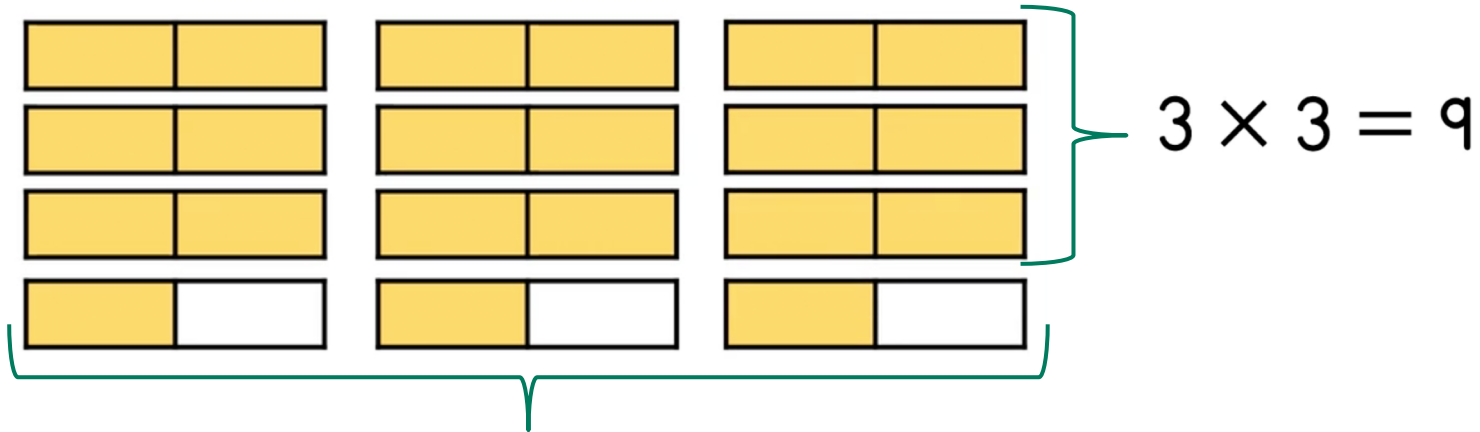
Can you complete this sentence?

When I multiply a fraction by an **integer** I notice_____.

Think:
What is the same
and what is
different between
the fraction and
the answer?

What about multiplying a **mixed number** by an **integer**?

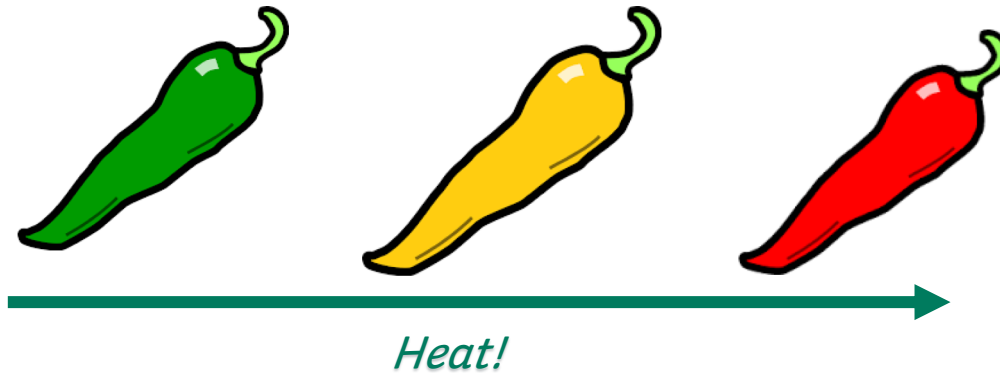
$$3\frac{1}{2} \times 3 =$$



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



The independent work continues on the next two slides. There are 8 questions and 1 extension.



Multiply fractions by integers



Complete the calculations.

a)

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



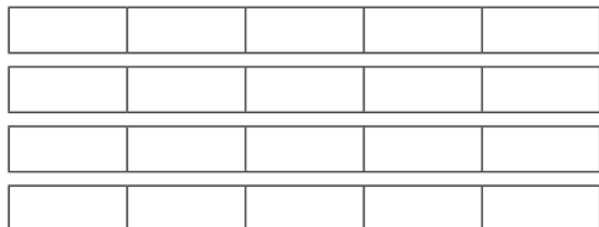
b)



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



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



b) Complete the multiplication.

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

3

Complete the calculations.



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

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

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

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

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

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



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

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

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

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

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

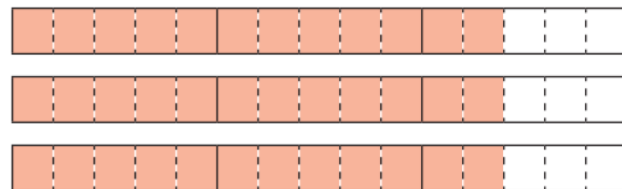
$$\frac{3}{4} \times 6 = \boxed{}$$

What patterns do you notice?



Complete the multiplication.

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



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

5 Match the calculations.



$$\frac{2}{3} + \frac{2}{3}$$

$$\frac{1}{2} \times 6$$

$$\frac{1}{4} \times 24$$

$$18 \times \frac{1}{4}$$

$$\frac{3}{4} + \frac{3}{4} + \frac{3}{4} + \frac{3}{4}$$

$$\frac{1}{6} \times 10$$

$$\frac{5}{12} \times 4$$

$$12 \times \frac{1}{2}$$

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

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

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) $\frac{11}{15} \times 7 =$

7 Fill in the missing numbers.



a) $2\frac{\square}{7} \times 3 = 6\frac{6}{7}$

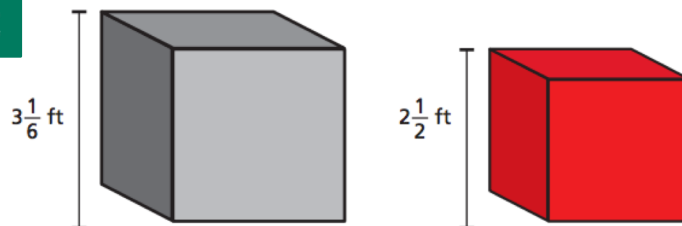
b) $2\frac{\square}{8} \times 3 = 7\frac{1}{2}$

8 Tommy's dog eats $3\frac{1}{2}$ tins of food a week.

How many tins does she eat in a year?



Ext



Jack builds a tower using grey blocks.

Alex builds a tower using red blocks.

The towers are exactly the same height.

How many blocks could they each have used?

