

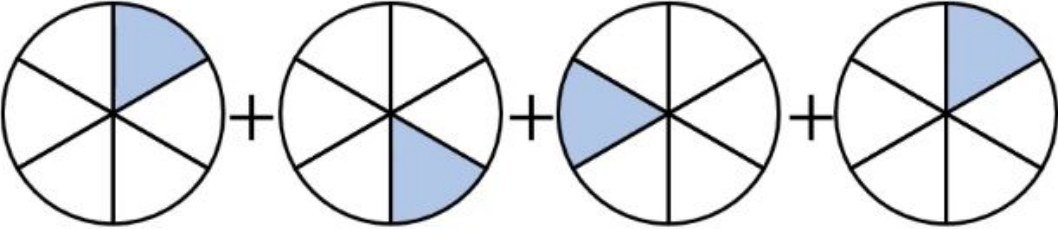
I can multiply fractions by
integers.

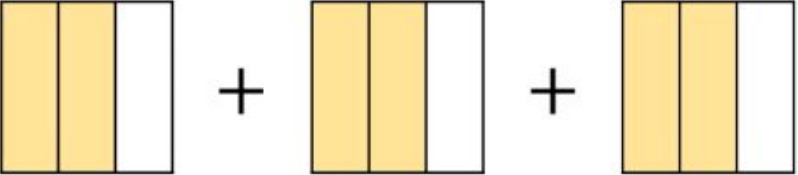
27.11.20

Warm up...

What is an integer?

Warm up...

1) 

2) 

3) Two sevenths + two sevenths + two sevenths =

Warm up...

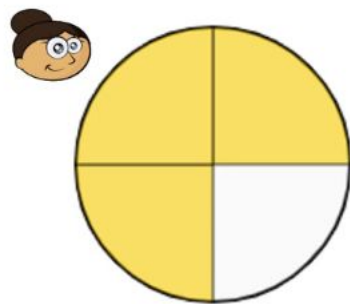
There are 3 flowers in a vase.



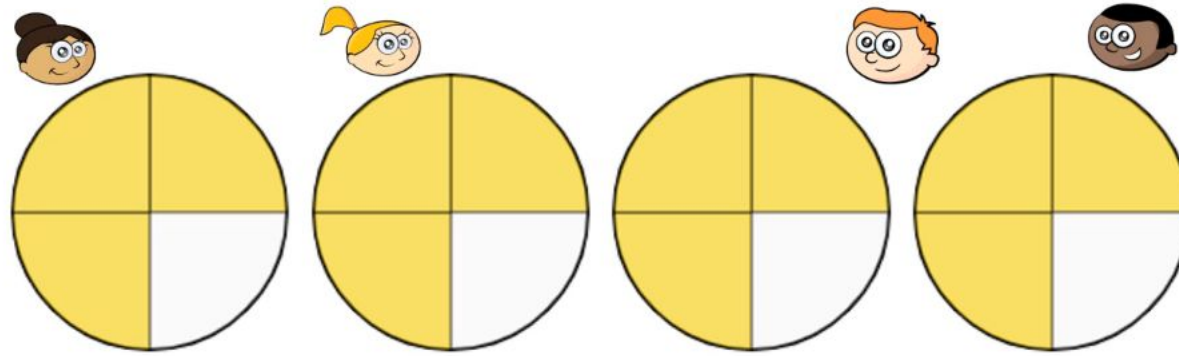
If there are 4 vases, how many flowers will there be?

Let's work this out...

Each person gets 3 quarters of a cake.



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



3 quarters \times 4 = 12 quarters

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



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

$$\frac{3}{7} \times 4 = \frac{\boxed{}}{7}$$

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

Your task...

Multiply fractions by integers

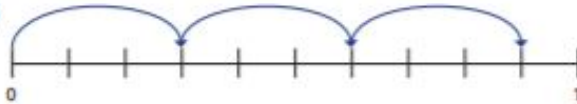
1 Complete the calculations.

a)

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

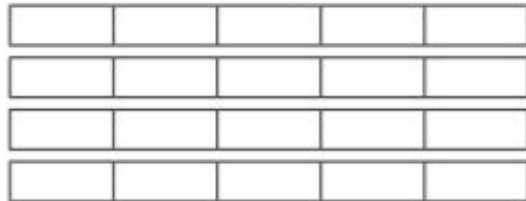


b)



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

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



b) Complete the multiplication.

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

3 Complete the calculations.

a) $\frac{1}{3} \times 1 = \square$

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

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

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

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

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

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

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

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

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

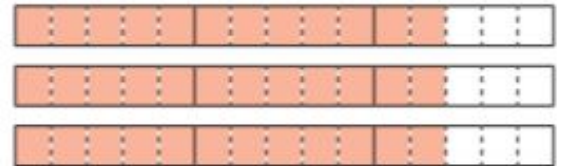
$$\frac{3}{4} \times 5 = \square$$

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

What patterns do you notice?

4 Complete the multiplication.

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



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



Your task...

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

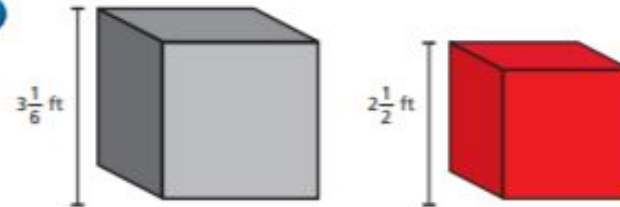
- 7 Fill in the missing numbers.

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?

- 9



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?



Problem Solving...

Eva and Amir both work on a homework project.



Eva

I spent $4\frac{1}{4}$ hours a week for 4 weeks doing my project.

I spent $2\frac{3}{4}$ hours a week for 5 weeks doing my project.



Amir

Who spent the most time on their project?

Explain your reasoning.

Problem Solving...

Eva and Amir both work on a homework project.



Eva

I spent $4\frac{1}{4}$ hours a week for 4 weeks doing my project.

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Amir

Who spent the most time on their project?

Explain your reasoning.

$$4 \times 4\frac{1}{4} = \frac{68}{4}$$

$$= 17 \text{ hours}$$

$$5 \times 2\frac{3}{4} = \frac{55}{4}$$

$$= 13\frac{3}{4} \text{ hours}$$

Eva spent $3\frac{1}{4}$ hours longer on her project than Amir did.

If you multiply $\frac{2}{7}$ by an integer, you will never get a whole number answer.

True or False?

Multiply fractions by integers

False

For example $\frac{2}{7} \times 7 = \frac{14}{7}$ which is equal to 2