



# Colin and Coco's Daily Maths Workout

Workout 1.4

Answers

Fractions: Representing and Equivalence



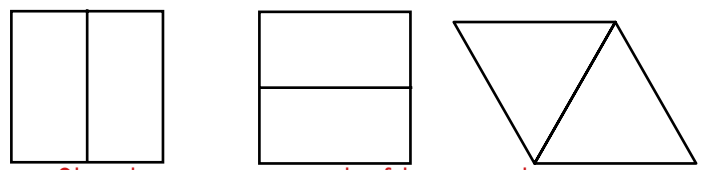


# Fractions: Workout

Workout A

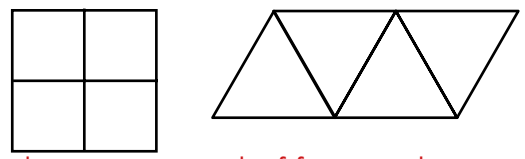
Represent each fraction in different ways using the diagrams

$\frac{1}{2}$

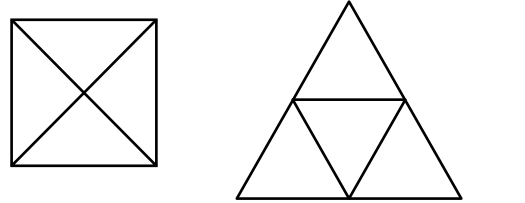
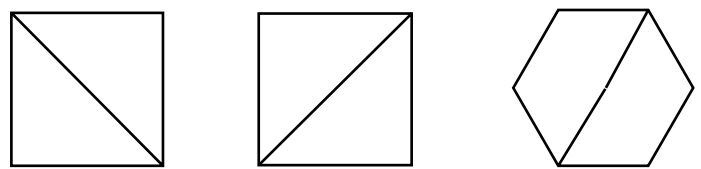


Shade any one out of two parts.

$\frac{1}{4}$



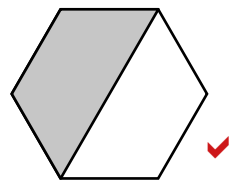
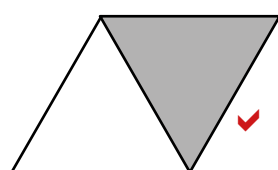
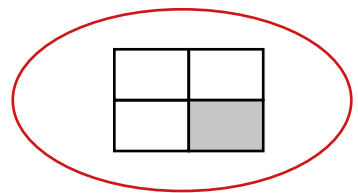
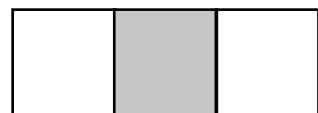
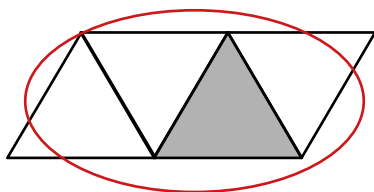
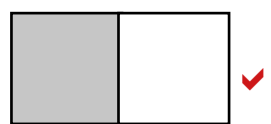
Shade any one out of four parts.



# Fractions: Workout

Workout B

Tick the shapes that represent  $\frac{1}{2}$  Circle the shapes that represent  $\frac{1}{4}$



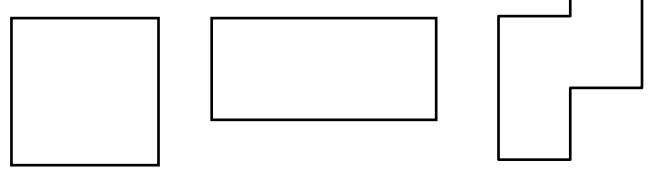
# Fractions: Workout

Workout C

Represent each fraction in different ways using the diagrams

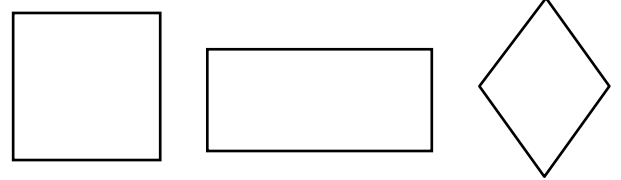
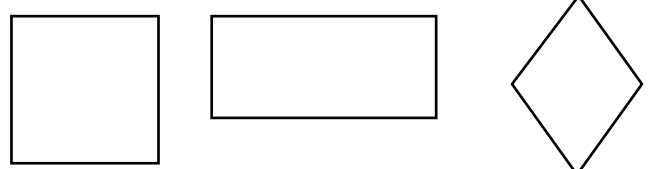
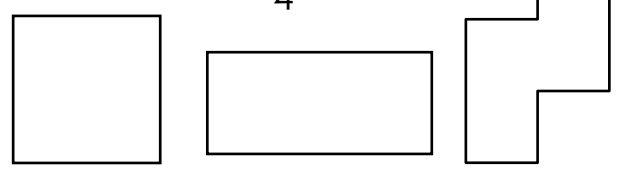
Shape divided into 2 equal parts, with one part shaded.

$\frac{1}{2}$



Shape divided into 4 equal parts, with one part shaded.

$\frac{1}{4}$





# Shape Shader Game

You need:

Fraction Baseboard (at the bottom of this page.)

A set of cards 1 - 9 (Use playing cards or print off the cards at the back of the pack.)

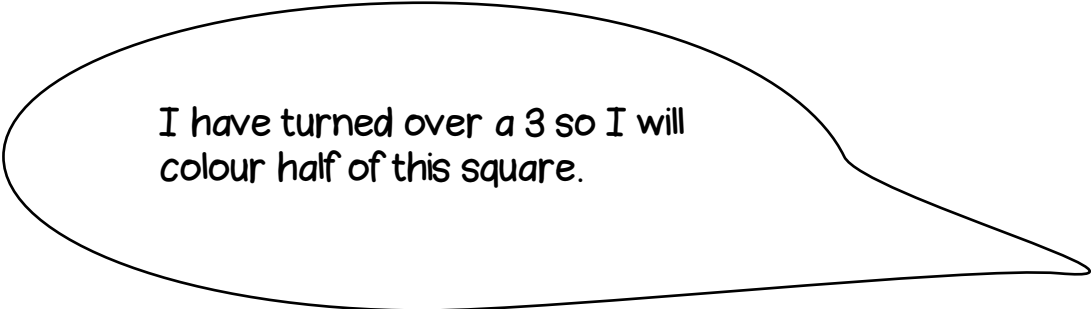
To play:

Shuffle the cards and put them in a deck face down.

Take it in turns to turn over a card.

If you get 1, 2, 3 or 4 you colour  $\frac{1}{2}$  of one of your shapes.

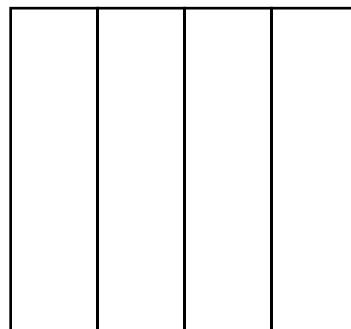
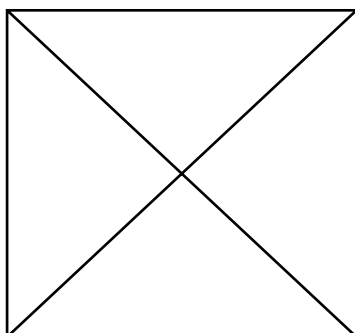
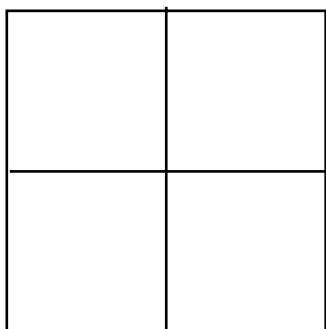
If you get 5, 6, 7, 8 or 9 you colour  $\frac{1}{4}$  of one of your shapes.



Place the card back into the deck.

To win:

The winner is the first player to colour all of their shapes.





## Missing Number Workout

Workout E

Put digits in the empty boxes to make the problems correct.  
Complete each one in several different ways.

Colin is shading a shape with 12 squares.

Possible  
Solution

He shades  $\frac{1}{4}$  of the shape.

He shades  $\boxed{3}$  squares.

Coco is shading a shape with  $\boxed{10}$  squares.

She shades  $\frac{1}{2}$  of the shape.

She shades  $\boxed{5}$  squares.

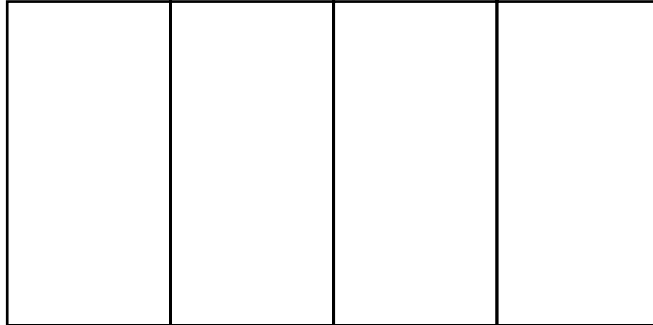
Now complete it using the digits 0, 1, 2, 3, 4 and 5  
once each.



# Flag Challenge

Workout F

Coco is designing a flag.  
She has three colours: red, yellow and blue.



She colours  $\frac{1}{2}$  of the flag red.

She colours  $\frac{1}{4}$  of the flag yellow and  $\frac{1}{4}$  of the flag blue.

Colour the flag in at least six different ways.

How many other ways can you find? Do you think you have found them all?  
How do you know?

All the possibilities with the  
first section Red.

RRBY  
RRYB  
RBR Y  
RYRB  
RYBR  
RBYR

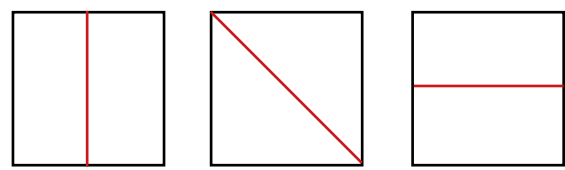
Other possibilities

BRRY  
YRRB  
BRYR  
YRBR  
YBRR  
BYRR



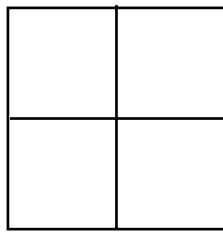
# Word Problem Workout

Coco is designing a square cushion cover. She wants to have half pink and half white. How could she divide her cushion? Show three ways.



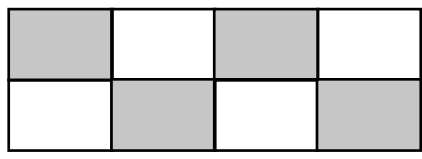
Colin thinks he can not shade half of this flag because it does not have two equal parts. Convince Colin he is not right.

Each equal part is made up of two squares so he can shade half in several ways.



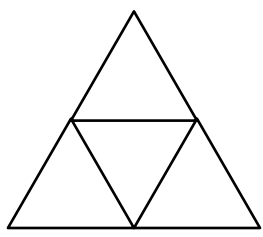
Colin thinks half of the patio has grey slabs. Do you agree?

Yes, because one out of every two is shaded. The equal parts are made up of 4 squares.



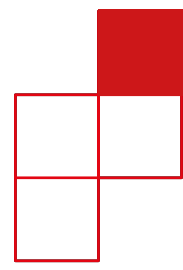
Coco thinks she can not shade  $\frac{1}{4}$  of this shape because it is not a rectangle. Convince Coco she is not right.

If you can find four equal parts you can find a quarter of any shape.



Divide this shape so you can show  $\frac{1}{4}$

Shape divided into four equal parts, with one part shaded, e.g.



Create your own shapes to show  $\frac{1}{4}$  or  $\frac{1}{2}$



# Number of the Day Workout

Today's number is

Write it in words

Draw It

Double It

1 less

Draw It another way

1 more

10 more

10 less

Calculation so it is the difference.

Calculation so it is the total.



## Cards for the Games

1

2

3

4

5

6

7

8

9