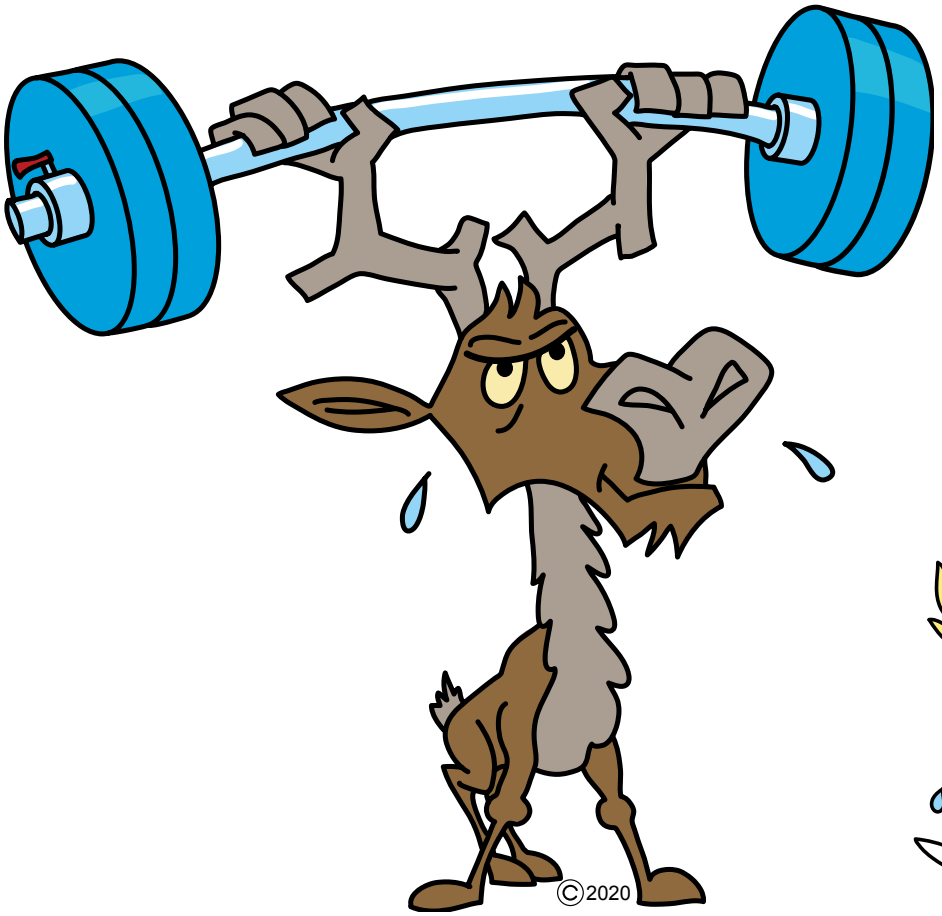
Colin and Coco's Daily Maths Workout

Workout 2.4 Answers

Fractions: Representing and Equivalence

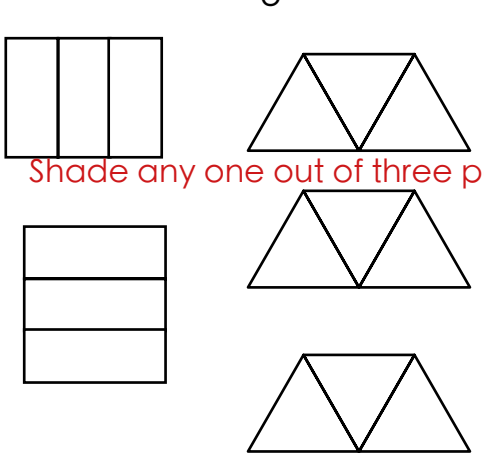


Fractions Workout

Workout A

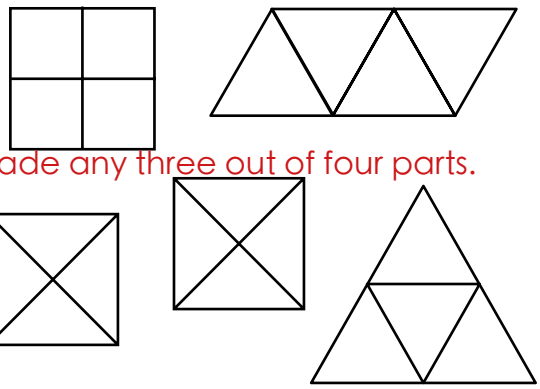
Represent each fraction in different ways using the diagrams

$\frac{1}{3}$



Shade any one out of three parts.

$\frac{3}{4}$

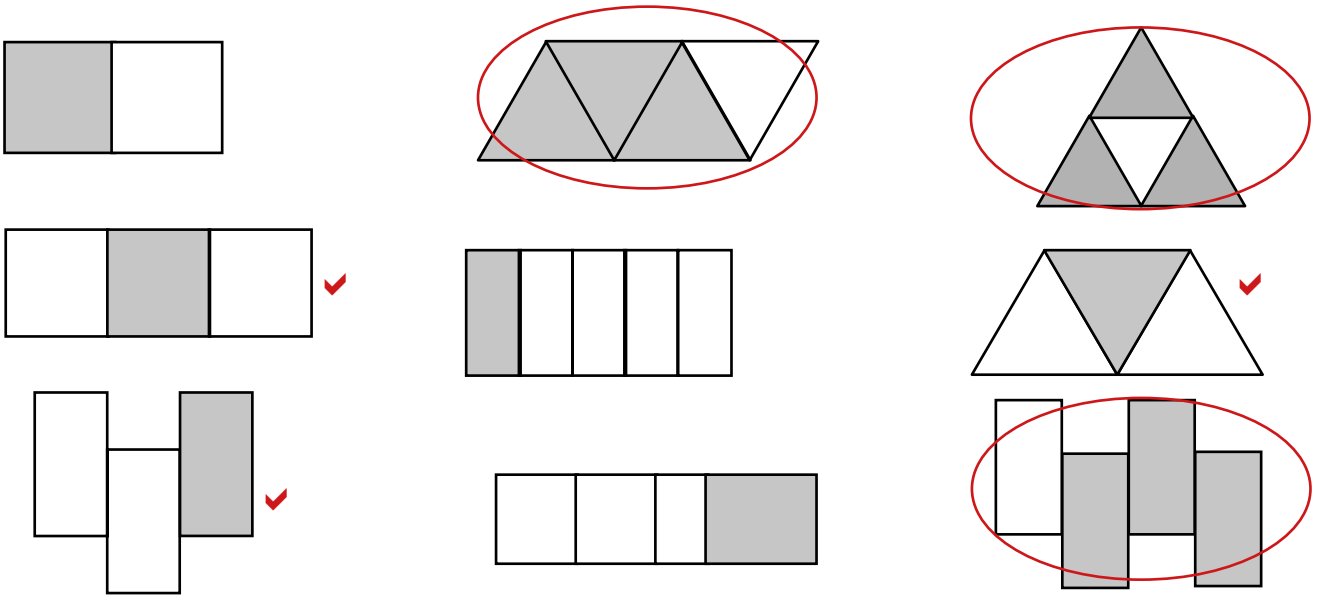


Shade any three out of four parts.

Fractions Workout

Workout B

Tick the shapes that represent $\frac{1}{3}$ Circle the shapes that represent $\frac{3}{4}$



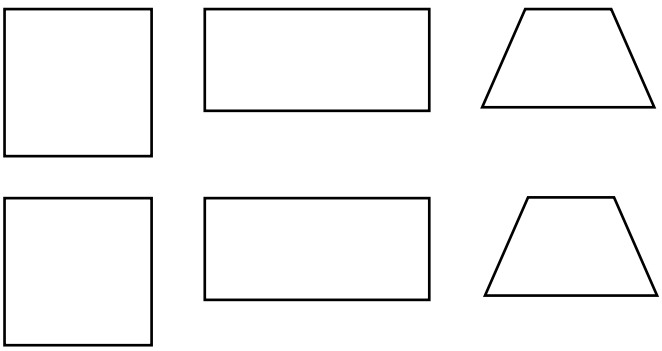
Fractions Workout

Workout C

Represent each fraction in different ways using the diagrams

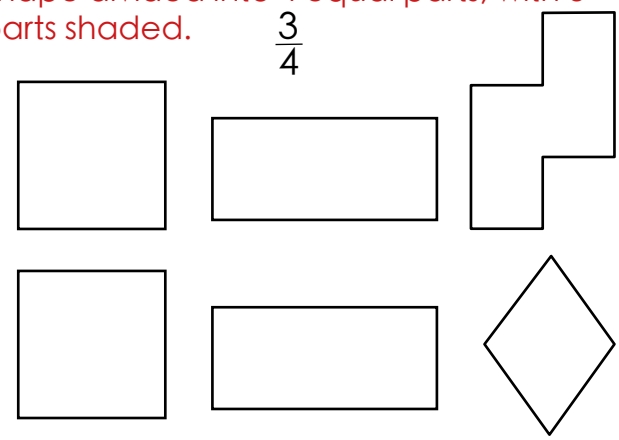
Shape divided into 3 equal parts, with one part shaded.

$\frac{1}{3}$



Shape divided into 4 equal parts, with 3 parts shaded.

$\frac{3}{4}$



Shape Shader Game

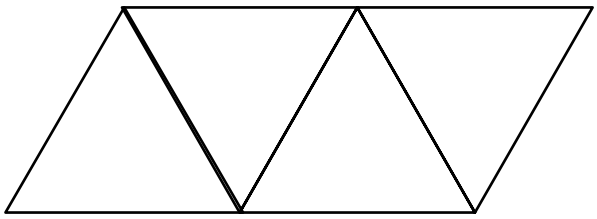
You need:
Fraction Baseboard (at the bottom of this page.)
A set of cards 1 - 9 (Use playing cards or print off the cards at the back of the pack.)

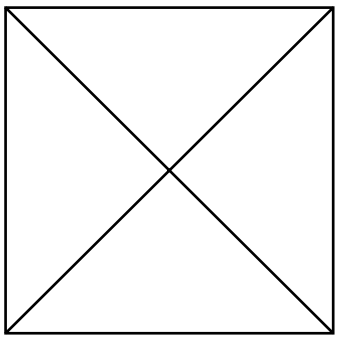
To play:
Shuffle the cards and put them in a deck face down.
Take it in turns to turn over a card.
If you get 1, 2, 3 or 4 you colour $\frac{3}{4}$ of one of your shapes. If you get 5, 6 or 7 you colour $\frac{1}{4}$ of one of your shapes. If you get 8 or 9 you colour $\frac{1}{2}$ of one of your shapes.

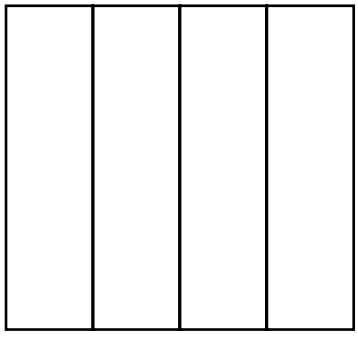
I have turned over a 6 so I will colour one quarter of this square.

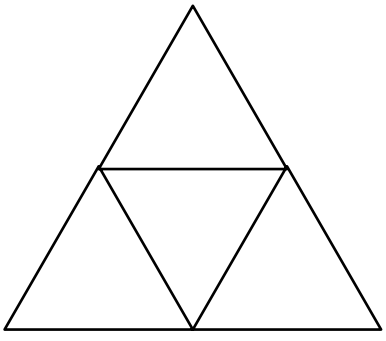
Place the card back into the deck.

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 2[0] squares.

Possible Solution

He shades $\frac{3}{4}$ of the shape.

He shades [1][5] squares.

Coco is shading a shape with 1[8] squares.

She shades $\frac{1}{[3]}$ of the shape.

She shades [6] squares.

Coco is shading a shape with 1[4] squares.

He shades $\frac{[2]}{4}$ of the shape.

He shades [7] squares.

Now complete it using the digits 0, 1, 2, 3, 4, 5, 6, 7 and 8 once each.

Flag Challenge

Workout F

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

She colours $\frac{1}{3}$ of the flag red.

She colours $\frac{1}{3}$ of the flag yellow and $\frac{1}{3}$ of the flag blue.

Colour the flag in six different ways.

RYB
RBY
BRY
YRB
BYR
YBR

Now what if she has just red and blue? She could do all three of the thirds red, or two of the thirds blue and one third red...and so on.

Investigate the different ways she could colour the flag now.

RRR

RRB
RBR
BRR

BBR
BRB
RBB

BBB

Word Problem Workout

Workout G

Coco climbs $\frac{1}{4}$ of the way up the mountain.
Colin climbs $\frac{1}{3}$ of the way up the mountain.

Who has gone further up the mountain?

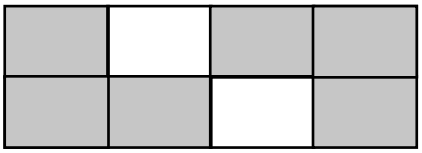
Colin

Colin eats $\frac{1}{2}$ of the cake. Coco eats $\frac{2}{4}$ of the cake.
Who has eaten more of the cake?

Equal

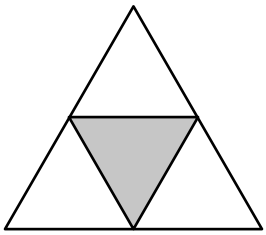
Colin thinks $\frac{3}{4}$ of the patio has grey slabs.
Do you agree?

Yes, because 3 out of every 4 are shaded.



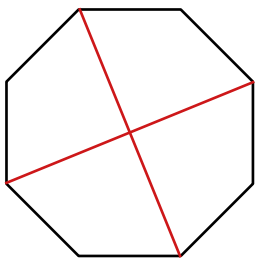
Coco thinks she has shaded $\frac{1}{3}$ of this shape because one part is grey and three parts are white.
Convince Coco she is not right.

For thirds you need three equal parts



Divide this shape so you can show $\frac{3}{4}$

e.g.



Create your own shapes to show $\frac{3}{4}$ or $\frac{1}{3}$

Workout H

Number of the Day Workout

Today's number is

Write it in words

Draw It

Double It

Halve It

Draw It another way

Add 9

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