



Colin and Coco's Deliberate Practice

Year 3 Unit 11

Fractions

Answers





Contents

This pack of deliberate practice is designed to be used flexibly to secure the manageable steps of this unit.

The table below indicates which activities are linked to which manageable steps.

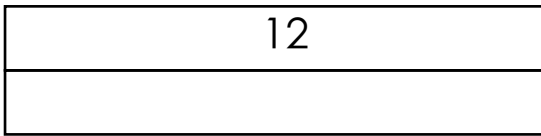
	Do It	Challenge It	Play It
Find unit fractions of a number of objects	1		
Find unit fractions of an amount			1
Find non-unit fractions of a number of objects		1	
Find non-unit fractions of an amount			2
Add fractions with the same denominator within one whole		2	
Subtract fractions with the same denominator within one whole	2		



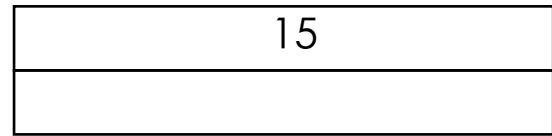
Do It 1

Use cubes to solve the following and represent them as a bar models.

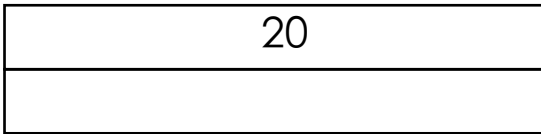
$$\frac{1}{4} \text{ of } 12 = \boxed{3}$$



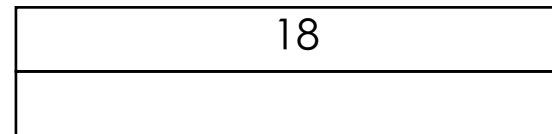
$$\frac{1}{3} \text{ of } 15 = \boxed{5}$$



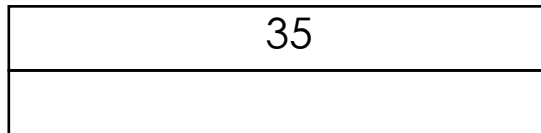
$$\frac{1}{5} \text{ of } 20 = \boxed{4}$$



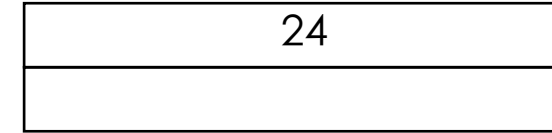
$$\frac{1}{6} \text{ of } 18 = \boxed{3}$$



$$\frac{1}{7} \text{ of } 35 = \boxed{5}$$



$$\frac{1}{8} \text{ of } 24 = \boxed{3}$$



Challenge It 1

Use up to 20 cubes complete the statement in as many different ways as you can.

$$\frac{2}{3} \text{ of } \boxed{15} = \boxed{10}$$

possible
solution

What do you notice about the number of cubes you use each time
and the number in the answer?

Investigate numbers of cubes for different non-unit fractions.



Fractions of Cubes Game

Play It 1

You need:

1 - 6 dice

To play:

Cubes are put in piles of the following amounts:

12 16 18 20 24 30

Players take turns to throw the dice and take a fraction of any pile of cubes that is possible.

Throw 1 - Miss a go.

Throw 2 - Find and keep one half of a pile of cubes.

Throw 3 - Find and keep one third of a pile of cubes.

Throw 4 - Find and keep one quarter of a pile of cubes.

Throw 5 - Find and keep one fifth of a pile of cubes.

Throw 6 - Find and keep one sixth of a pile of cubes.

Play continues until any player has two impossible goes.

Players then find the total of their cubes.

To win:

The winner is the player with the most cubes.

This can be played with cubes or just finding fractions of the numbers.



Do It 2

Calculate:

$$\frac{2}{4} - \frac{1}{4} = \boxed{\frac{1}{4}}$$

$$\frac{7}{8} - \frac{1}{8} = \boxed{\frac{6}{8}}$$

$$\frac{5}{8} - \frac{2}{8} = \boxed{\frac{3}{8}}$$

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

$$\frac{3}{5} - \frac{2}{5} = \boxed{\frac{1}{5}}$$

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

$$\frac{5}{6} - \frac{1}{6} = \boxed{\frac{4}{6}}$$

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

$$\frac{6}{7} - \frac{3}{7} = \boxed{\frac{3}{7}}$$

$$\frac{4}{5} - \frac{1}{5} = \boxed{\frac{3}{5}}$$

$$\frac{5}{10} - \frac{3}{10} = \boxed{\frac{2}{10}}$$

$$\frac{9}{10} - \frac{6}{10} = \boxed{\frac{3}{10}}$$

Match the calculation to the answer.
Find the missing buddies.

Challenge It 2

$\frac{1}{10} + \frac{7}{10}$		$\frac{7}{10}$
$\frac{3}{10} + \frac{4}{10}$		$\frac{9}{10}$
$\frac{6}{10} + \frac{3}{10}$		$\frac{8}{10}$
$\frac{5}{10} + \frac{1}{10}$		$\frac{5}{8}$
$\frac{2}{5} + \frac{2}{5}$		$\frac{4}{5}$
$\frac{2}{5} + \frac{1}{5}$		$\frac{3}{5}$
$\frac{5}{8} + \frac{2}{8}$		$\frac{6}{10}$
$\frac{3}{8} + \frac{2}{8}$		$\frac{6}{8}$
$\frac{2}{8} + \frac{4}{8}$		$\frac{7}{8}$



Fractions of Amounts Game

Play It 2

You need:
1 - 6 dice

To play:

Players take turns to throw the dice twice.

Use the smaller number as the numerator and the larger number as the denominator to make a fraction. If the same number is thrown twice, re-roll one of the dice.

Choose a number less than 20.

Find the fraction of this number.

This is the score.

For example:

Player 1: Throws 3 and 5
Makes the fraction $\frac{3}{5}$

Chooses 15 as their amount

Finds $\frac{3}{5}$ of 15 is 9

Scores 9

To win:

The winner is the player with the highest score after four goes each.