

Numeracy Colouring-In

Australian Curriculum V9.0 links for
Years 5-7

Mathematics

- Number

General Capabilities

- Numeracy

Background:

This task explores the relationship between percentages, decimals, and fractions through a colour-by-numbers activity. Students solve problems that require them to convert between these forms and apply their understanding to select the correct colours for each part of an image. The activity reinforces key concepts while building fluency with common conversions in a fun, visual way.

Curriculum links:

Year 5

AC9M5N04: recognise that 100% represents the complete whole and use percentages to describe, represent and compare relative size; connect familiar percentages to their decimal and fraction equivalents

Year 6

AC9M6N07: solve problems that require finding a familiar fraction, decimal or percentage of a quantity, including percentage discounts, choosing efficient calculation strategies and using digital tools where appropriate

Year 7

AC9M7N06: use the 4 operations with positive rational numbers including fractions, decimals and percentages to solve problems using efficient calculation strategies

Learning outcomes:

All students will be able to:

- solve problems using fractions, decimals, and percentages.
- match their answers to colours and complete a numeracy colouring-in sheet.

In addition, some students will be able to:

- explain how they solved each problem and why they chose their method.
- connect percentages to fractions and decimals, and apply this understanding to real-world contexts like discounts, data, and measurement—skills that build strong foundations for STEM learning.



Name: _____

Date: _____

Fractions, Decimals and Percentages Activity Sheet

Solve each problem. Find the answers in the picture.
Colour each one to make the picture come to life.

Light Green

Fractions to Decimals

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

$$\frac{5}{8} =$$

$$\frac{5}{10} =$$

$$\frac{2}{5} =$$

$$\frac{9}{20} =$$

$$\frac{10}{10} =$$

$$\frac{8}{4} =$$

Black

Fractions to Percentages

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

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

$$\frac{3}{8} =$$

$$\frac{7}{10} =$$

$$\frac{4}{16} =$$

Orange

Decimals to Fractions

$$0.6 =$$

$$0.125 =$$

$$0.75 =$$

$$0.2 =$$

Brown

Percentages to Fractions

$$35\% =$$

$$150\% =$$

$$25\% =$$

Dark Green

Which is greater?

$$\frac{1}{5} \text{ or } 0.4$$

$$-0.75 \text{ or } -80\%$$

$$66.6\% \text{ or } \frac{1}{3}$$

$$99\% \text{ or } 0.9$$

Grey

Which is greater?

$$0.4 \text{ or } \frac{3}{5}$$

$$-0.75 \text{ or } 1.25$$

$$\frac{1}{3} \text{ or } 0.25$$

$$0 \text{ or } -99\%$$

Yellow

Percentages to Decimals

$$85\% =$$

$$1\% =$$

Pale Pink

Decimals to Percentages

$$0.2 =$$

$$0.6 =$$

$$0.9 =$$

Pink

180% as a simple fraction

=

Dark Blue

30% as a decimal

=

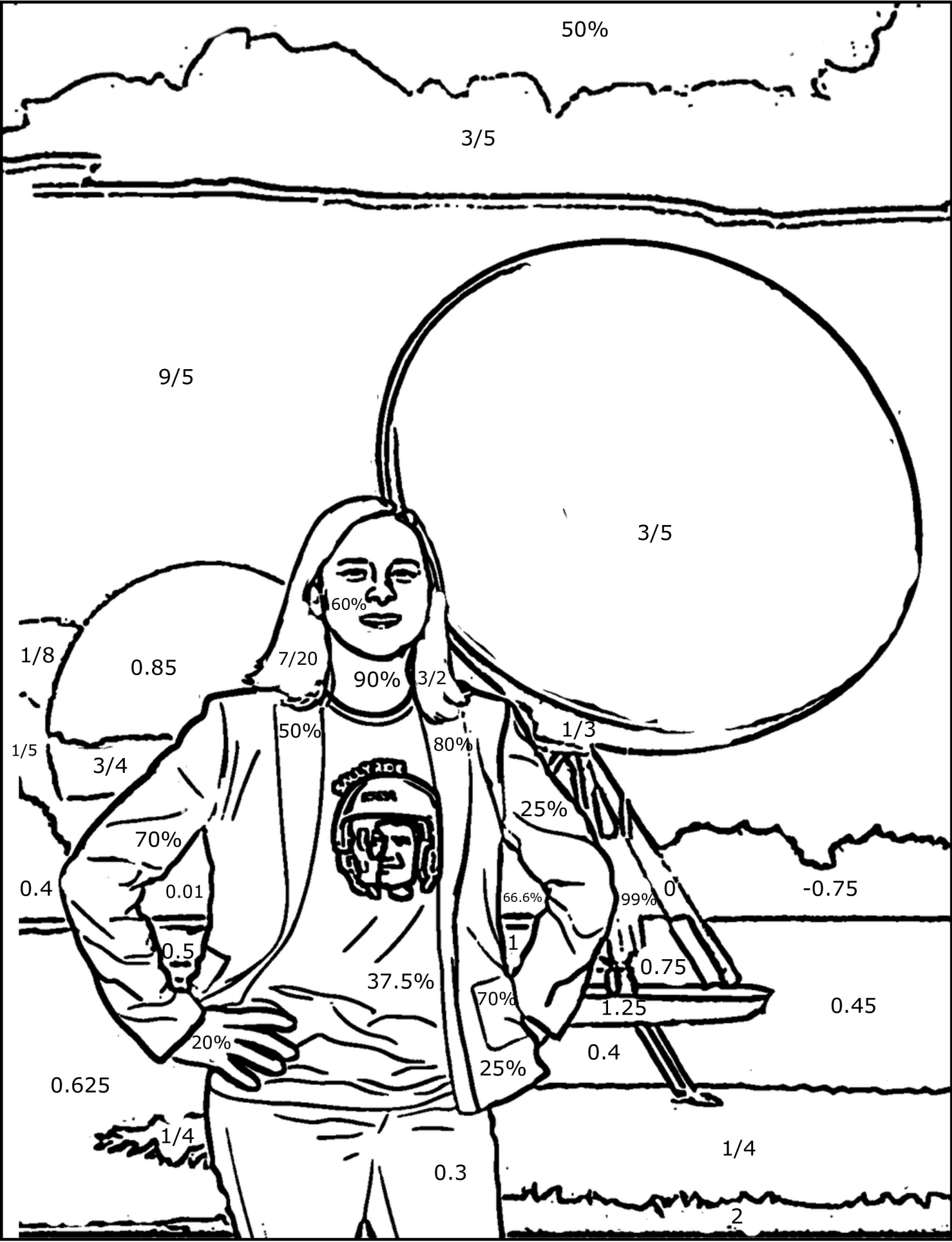
Purple

$\frac{4}{8}$ as a percentage

=

Name: _____

Date: _____





Answers

Fractions, Decimals and Percentages Activity Sheet

Light Green

Fractions to Decimals

$$3/4 = 0.75$$

$$5/8 = 0.625$$

$$5/10 = 0.5$$

$$2/5 = 0.4$$

$$9/20 = 0.45$$

$$10/10 = 1$$

$$8/4 = 2$$

Black

Fractions to Percentages

$$1/2 = 50\%$$

$$4/5 = 80\%$$

$$3/8 = 37.5\%$$

$$7/10 = 70\%$$

$$4/16 = 25\%$$

Orange

Decimals to Fractions

$$0.6 = 3/5$$

$$0.125 = 1/8$$

$$0.75 = 3/4$$

$$0.2 = 1/5$$

Brown

Percentages to Fractions

$$35\% = 7/20$$

$$150\% = 3/2$$

$$25\% = 1/4$$

Dark Green

Which is greater?

$$0.4$$

$$-0.75$$

$$66.6\%$$

$$99\%$$

Yellow

Percentages to Decimals

$$85\% = 0.85$$

$$1\% = 1$$

Grey

Which is greater?

$$3/5$$

$$1.25$$

$$1/3$$

$$0$$

Pale Pink

Decimals to Percentages

$$0.2 = 20\%$$

$$0.6 = 60\%$$

$$0.9 = 90\%$$

Pink

180% as a simple fraction

$$= 9/5$$

Dark Blue

30% as a decimal

$$= 0.3$$

Purple

4/8 as a percentage

$$= 50\%$$