

Reasoning and Problem Solving

Step 6: Recognise a Third

National Curriculum Objectives:

Mathematics Year 2: (2F1a) [Recognise, find, name and write fractions \$\frac{1}{3}\$, \$\frac{1}{4}\$, \$\frac{2}{4}\$ and \$\frac{3}{4}\$ of a length, shape, set of objects or quantity](#)

Mathematics Year 2: (2F1b) [Write simple fractions for example, \$\frac{1}{2}\$ of \$6 = 3\$](#)

Differentiation:

Questions 1, 4 and 7 (Problem Solving)

Developing Shade parts of a given shape to show different ways to represent one third. Using circles and squares divided into up to 3 equal parts.

Expected Shade parts of a given shape to show different ways to represent one third. Using triangles and polygons divided into up to 3 equal parts.

Greater Depth Shade parts of a given shape to show different ways to represent one third. Using triangles and quadrilaterals divided into up to 6 equal parts.

Questions 2, 5 and 8 (Reasoning)

Developing Find and explain the odd one out. Shapes include circles and quadrilaterals.

Expected Find and explain the odd one out. Shapes include circles, triangles and quadrilaterals.

Greater Depth Find and explain the odd one out. Shapes include triangles and quadrilaterals divided into up to 6 equal parts.

Questions 3, 6 and 9 (Reasoning)

Developing Explain if a statement is true or false about 2 shapes being shaded in thirds. Using circles and squares divided into up to 3 equal parts.

Expected Explain if a statement is true or false about 2 shapes being shaded in thirds. Using triangles and polygons divided into up to 3 equal parts.

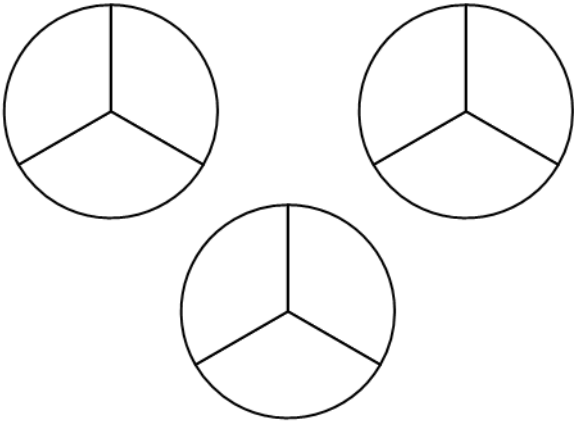
Greater Depth Explain if a statement is true or false about 2 shapes being unshaded in thirds. Using triangles and quadrilaterals divided into up to 6 equal parts.

More [Year 2 Fractions](#) resources.

Did you like this resource? Don't forget to [review](#) it on our website.

Recognise a Third

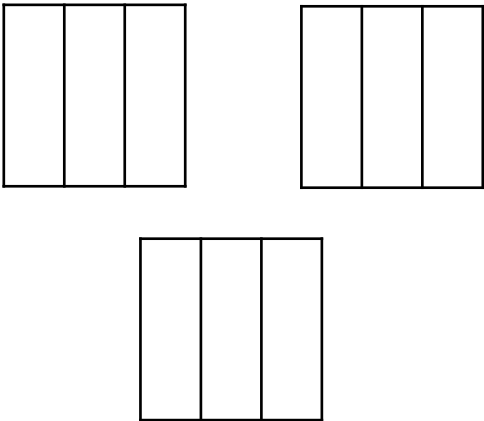
1a. Shade part of each shape to represent $\frac{1}{3}$. Find three different ways.



PS

Recognise a Third

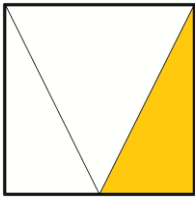
1b. Shade part of each shape to represent $\frac{1}{3}$. Find three different ways.



PS

2a. One third of each shape needs to be shaded. Find the mistake.

A.



B.



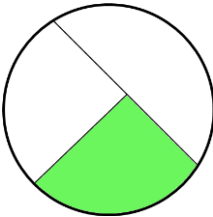
Explain your answer.



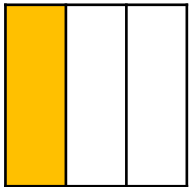
R

2b. One third of each shape needs to be shaded. Find the mistake.

A.



B.

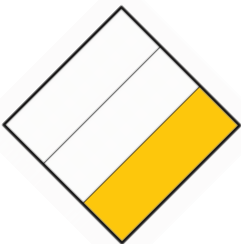
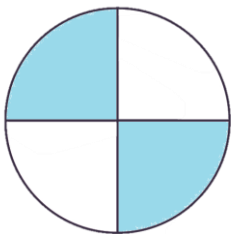


Explain your answer.



R

3a. True or false? Ken has shaded one third of each shape.

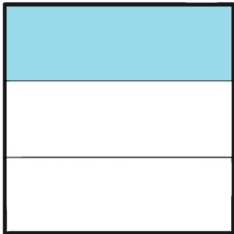
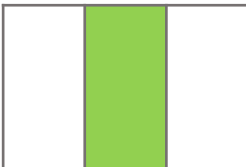


Convince me.



R

3b. True or false? Sammi has shaded one third of each shape.



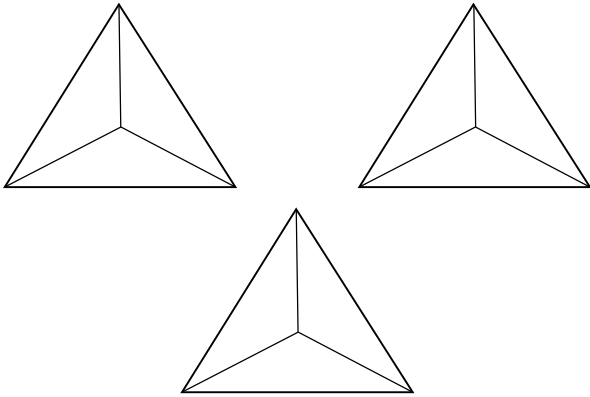
Convince me.



R

Recognise a Third

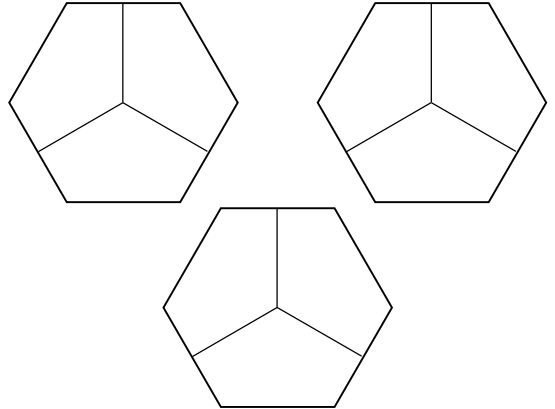
4a. Shade part of each shape to represent $\frac{1}{3}$. Find three different ways.



PS

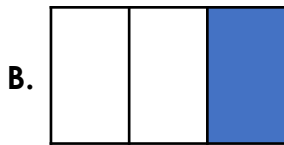
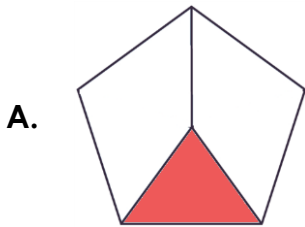
Recognise a Third

4b. Shade part of each shape to represent $\frac{1}{3}$. Find three different ways.



PS

5a. One third of each shape needs to be shaded. Find the mistake.

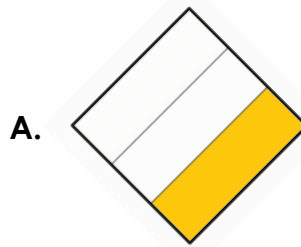


Explain your answer.



R

5b. One third of each shape needs to be shaded. Find the mistake.

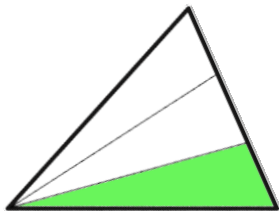
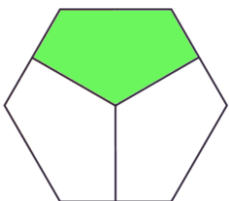


Explain your answer.



R

6a. True or false? Sara has shaded one third of each shape.

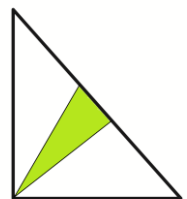
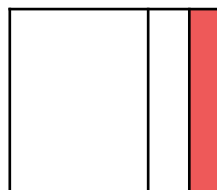


Convince me.



R

6b. True or false? Elizabeth has shaded one third of each shape.



Convince me.

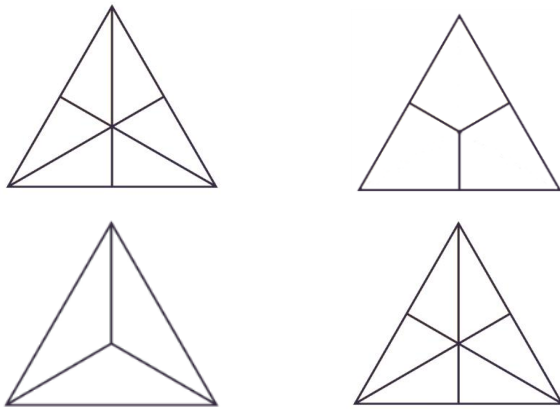


R

Recognise a Third

7a. Leave $\frac{1}{3}$ of each shape unshaded.

Find four different ways.

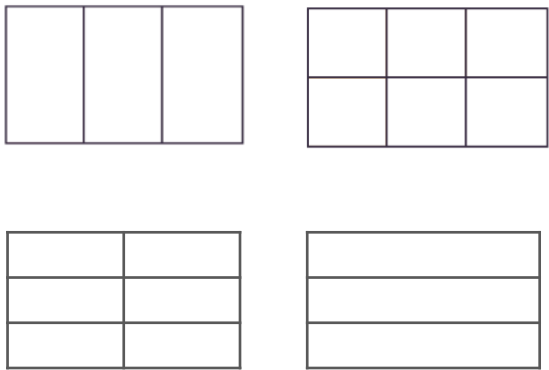


PS

Recognise a Third

7b. Leave $\frac{1}{3}$ of each shape unshaded.

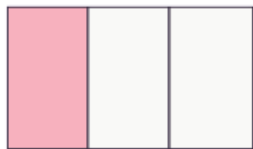
Find four different ways.



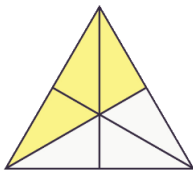
PS

8a. One third of each shape needs to be shaded. Find the mistake.

A.



B.



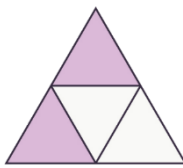
Explain your answer.



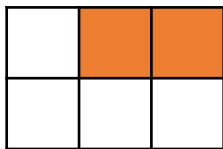
R

8b. One third of each shape needs to be shaded. Find the mistake.

A.



B.

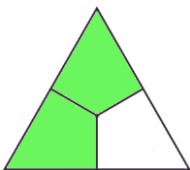
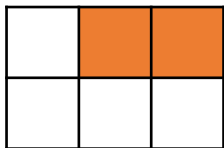


Explain your answer.



R

9a. True or false? Jack has left one third of each shape unshaded.

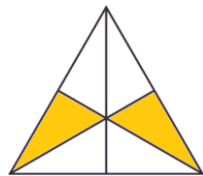
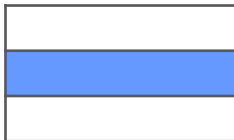


Convince me.



R

9b. True or false? Jack has left one third of each shape unshaded.



Convince me.



R

Reasoning and Problem Solving

Recognise a Third

Developing

- 1a. A different part shaded in each shape.
- 2a. Shape A has not been divided equally so it does not have thirds shaded.
- 3a. False because the circle has been divided into quarters and he has shaded two quarters of that shape.

Expected

- 4a. A different part shaded in each shape.
- 5a. Shape A has not been divided equally so it does not have thirds shaded.
- 6a. True because each shape has been equally divided into three and she has only shaded one part of each shape.

Greater Depth

- 7a. Where the shapes are divided into 3, 2 parts need to be shaded, where the shapes have been divided into 6, 4 parts need to be shaded.
- 8a. Shape B has been divided into six equal parts but 3 have been shaded so the shape represents half, rather than thirds.
- 9a. False because the rectangle has 4 equal parts out of 6 unshaded which is two thirds. The triangle is correct because it has one equal part unshaded.

Reasoning and Problem Solving

Recognise a Third

Developing

- 1b. A different part shaded in each shape.
- 2b. Shape A has not been divided equally so it does not have thirds shaded.
- 3b. True because each shape has been equally divided into three and she has only shaded one part of each shape.

Expected

- 4b. A different part shaded in each shape.
- 5b. Shape B has not been divided equally so it does not have thirds shaded.
- 6b. False because neither shape has been divided equally into thirds so neither shape has a third shaded.

Greater Depth

- 7b. Where the shapes are divided into 3, 2 parts need to be shaded, where the shapes have been divided into 6, 4 parts need to be shaded.
- 8b. Shape A has been divided into quarters.
- 9b. False because one third of each shape has been shaded rather than left unshaded.