Reasoning and Problem Solving
Step 3: Equivalent Fractions 3

National Curriculum Objectives:

Mathematics Year 3: (3F2) Recognise and show, using diagrams, equivalent fractions with small denominators

Differentiation:

Questions 1, 4 and 7 (Reasoning)
Developing Find the odd fraction from images, fractions and words and explain the answer. Including equivalent halves and quarters.
Expected Find the odd fraction from images, fractions and words and explain the answer. Including equivalent thirds, fifths and tenths.
Greater Depth Find the odd fraction from images, fractions and words and explain the answer. Including equivalent sixths, sevenths, eighths and ninths.

Questions 2, 5 and 8 (Reasoning)
Developing Spot the errors in a row of equivalent fractions and explain the answer. Including fractions equivalent to unit fractions (when simplified) up to eighths.
Expected Spot the errors in a row of equivalent fractions and explain the answer. Including fractions equivalent to non-unit fractions (when simplified) up to twelfths.
Greater Depth Spot the errors in a row of equivalent fractions and explain the answer. Including fractions that are equivalent to simplified fractions up to twelfths, where the simplified fraction is not always given.

Questions 3, 6 and 9 (Problem solving)
Developing Use a set of digit cards to make an equivalent fraction to the one given. Including fractions equivalent to unit fractions (when simplified) up to eighths.
Expected Use a set of digit cards to make an equivalent fraction to the one given. Including fractions equivalent to non-unit fractions (when simplified) up to twelfths.
Greater Depth Use a set of digit cards to make an equivalent fraction to the one given. fractions that are equivalent to simplified fractions up to twelfths, where the simplified fraction is not always given.

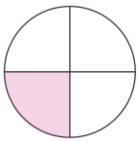
More Year 3 Fractions resources.

Did you like this resource? Don't forget to review it on our website.

Equivalent Fractions 3

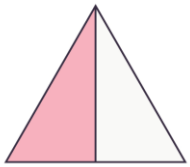
Equivalent Fractions 3

1a. Which fraction is the odd one out? Explain your answer.



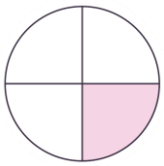
one half

$\frac{1}{2}$



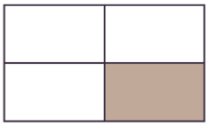
D R

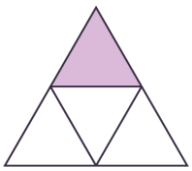
1b. Which fraction is the odd one out? Explain your answer.



one third

$\frac{1}{4}$





D R

2a. Find the error in these equivalent fractions.

$$\frac{1}{8} = \frac{2}{16}$$

$$\frac{1}{3} = \frac{3}{9} \qquad \frac{1}{4} = \frac{3}{8}$$

Explain your answer.

D R

2b. Find the error in these equivalent fractions.

$$\frac{1}{3} = \frac{4}{12}$$

$$\frac{1}{6} = \frac{2}{12} \qquad \frac{1}{4} = \frac{3}{11}$$

Explain your answer.

D R

3a. Use these digit cards to make an equivalent fraction to the one given.

$\frac{1}{2}$ 2 5 4 3

$\frac{1}{6}$ 12 5 2 8

D PS

3b. Use these digit cards to make an equivalent fraction to the one given.

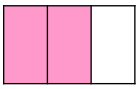
$\frac{1}{4}$ 3 9 11 12

$\frac{1}{8}$ 2 3 16 5

D PS

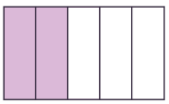
Equivalent Fractions 3

4a. Which fraction is the odd one out? Explain your answer.



two fifths

$\frac{2}{5}$



E R

5a. Find the error in these equivalent fractions.

$\frac{2}{3} = \frac{10}{15}$ $\quad \frac{2}{5} = \frac{8}{20}$

$\frac{3}{4} = \frac{12}{16}$ $\quad \frac{2}{7} = \frac{3}{14}$

Explain your answer.

E R

6a. Use these digit cards to make an equivalent fraction to the one given.

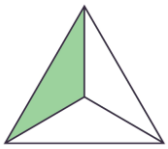
$\frac{2}{5}$ [6] [10] [4] [2]

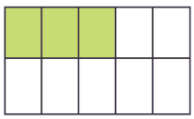
$\frac{3}{4}$ [2] [7] [20] [15]

E PS

4a. Which fraction is the odd one out? Explain your answer.

$\frac{1}{3}$





one third

E R

5b. Find the error in these equivalent fractions.

$\frac{2}{10} = \frac{6}{30}$ $\quad \frac{1}{5} = \frac{2}{15}$

$\frac{2}{3} = \frac{8}{12}$ $\quad \frac{2}{12} = \frac{4}{24}$

Explain your answer.

E R

6b. Use these digit cards to make an equivalent fraction to the one given.

$\frac{2}{3}$ [6] [10] [9] [20]

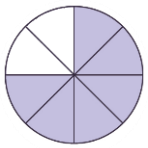
$\frac{2}{5}$ [24] [15] [12] [6]

E PS

Equivalent Fractions 3

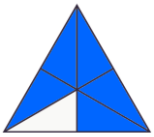
Equivalent Fractions 3

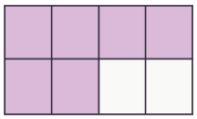
7a. Which fraction is the odd one out? Explain your answer.



six eighths

$\frac{6}{8}$



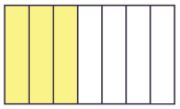


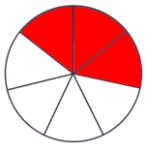
GD

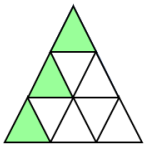
R

7b. Which fraction is the odd one out? Explain your answer.

$\frac{3}{7}$







Three sevenths

GD

R

8a. Find the errors in these equivalent fractions.

$\frac{4}{8} = \frac{14}{24}$ $\quad \frac{6}{9} = \frac{18}{27}$

$\frac{6}{14} = \frac{8}{21}$ $\quad \frac{1}{13} = \frac{2}{26}$

Explain your answer.

GD

R

8b. Find the error in these equivalent fractions.

$\frac{3}{15} = \frac{4}{30}$ $\quad \frac{4}{7} = \frac{8}{14}$

$\frac{6}{8} = \frac{18}{25}$ $\quad \frac{4}{5} = \frac{8}{10}$

Explain your answer.

GD

R

9a. Use these digit cards to make an equivalent fraction to the one given.

$\frac{6}{27}$ 18 22 4 6

$\frac{4}{12}$ 24 8 16 28

GD

PS

9b. Use these digit cards to make an equivalent fraction to the one given.

$\frac{9}{24}$ 16 6 8 18

$\frac{2}{14}$ 28 4 3 24

GD

PS

Reasoning and Problem Solving
Equivalent Fractions 3

Developing

1a. $\frac{1}{4}$ is the odd one out because the others show $\frac{1}{2}$.

2a. $\frac{1}{4}$ is not equal to $\frac{3}{8}$, it should be $\frac{2}{8}$.

3a. Use the cards 2 and 4 to make $\frac{2}{4}$.

Use the cards 2 and 12 to make $\frac{2}{12}$.

Expected

4a. $\frac{1}{3}$ is the odd one out because the others show $\frac{2}{5}$.

5a. $\frac{2}{7}$ is not equal to $\frac{3}{14}$, it should be $\frac{4}{14}$.

6a. Use the cards 4 and 10 to make $\frac{4}{10}$.

Use the cards 15 and 20 to make $\frac{15}{20}$.

Greater Depth

7a. $\frac{5}{6}$ is the odd one out because the others show $\frac{6}{8}$.

8a. $\frac{4}{8}$ is not equal to $\frac{14}{24}$, it is $\frac{12}{24}$.

$\frac{6}{14}$ is not equal to $\frac{8}{21}$, it is $\frac{9}{21}$.

9a. Use the cards 4 and 18 to make $\frac{4}{18}$.

Use the cards 8 and 24 to make $\frac{8}{24}$.

Reasoning and Problem Solving
Equivalent Fractions 3

Developing

1b. $\frac{1}{3}$ is the odd one out because the others show $\frac{1}{4}$.

2b. $\frac{1}{4}$ is not equal to $\frac{3}{11}$, it should be $\frac{3}{12}$.

3b. Use the cards 3 and 12 to make $\frac{3}{12}$.

Use the cards 2 and 16 to make $\frac{2}{16}$.

Expected

4b. $\frac{3}{10}$ is the odd one out because the others show $\frac{1}{3}$.

5b. $\frac{1}{5}$ is not equal to $\frac{2}{15}$, it should be $\frac{2}{10}$.

6b. Use the cards 6 and 9 to make $\frac{6}{9}$.

Use the cards 6 and 15 to make $\frac{6}{15}$.

Greater Depth

7b. $\frac{3}{9}$ is the odd one out because the others show $\frac{3}{7}$.

8b. $\frac{3}{15}$ is not equal to $\frac{4}{30}$, it is $\frac{6}{30}$.

$\frac{6}{8}$ is not equal to $\frac{18}{25}$, it is $\frac{18}{24}$.

9b. Use the cards 6 and 16 to make $\frac{6}{16}$.

Use the cards 4 and 28 to make $\frac{4}{28}$.