

Homework/Extension

Step 2: Equivalent FDP

National Curriculum Objectives:

Mathematics Year 6: (6F6) [Associate a fraction with division and calculate decimal fraction equivalents \[for example, 0.375\] for a simple fraction \[for example, 3/8\]](#)

Mathematics Year 6: (6F11) [Recall and use equivalences between simple fractions, decimals and percentages, including in different contexts](#)

Differentiation:

Questions 1, 4 and 7 (Varied Fluency)

Developing Identify whether the statement is true or false. Using tenths, quarters and halves. Fractions may need to be simplified.

Expected Identify whether the statement is true or false. Using fifths, eighths, tenths, hundredths, quarters and halves. Fractions may need to be simplified.

Greater Depth Identify whether the statement is true or false. Using fifths, eighths, tenths, twentieths, hundredths, quarters and halves. Fractions may need to be simplified.

Questions 2, 5 and 8 (Varied Fluency)

Developing Match the percentage to its equivalent decimal and fraction. Using tenths, quarters and halves. Fractions may need to be simplified.

Expected Match the percentage to its equivalent decimal and fraction. Using fifths, tenths and quarters. Fractions may need to be simplified.

Greater Depth Match the percentage to its equivalent decimal and fraction. Using eighths and twentieths. Fractions may need to be simplified.

Questions 3, 6 and 9 (Reasoning and Problem Solving)

Developing Explain whether a given statement is correct. Using tenths and quarters. Fractions may need to be simplified.

Expected Explain whether a given statement is correct. Using eighths, tenths, quarters and halves. Fractions may need to be simplified.

Greater Depth Explain whether a given statement is correct. Using eighths and twentieths, or multiples of these fractions. Fractions may need to be simplified.

More [Year 6 Percentages](#) resources.

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

Equivalent FDP

1. True or false? All the fractions below have been correctly converted to their equivalent decimals and percentages.

A. $\frac{1}{4} = 0.25 = 25\%$

B. $\frac{1}{2} = 0.05 = 50\%$

C. $\frac{2}{10} = 0.2 = 20\%$



VF
HW/Ext

2. Match the percentage to its equivalent decimal and fraction.

50%

0.5

$\frac{3}{4}$

75%

0.3

$\frac{1}{2}$

30%

0.75

$\frac{3}{10}$



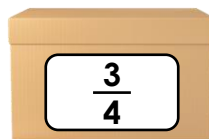
VF
HW/Ext

3. Marco is comparing the amount of oranges there are in the boxes below.

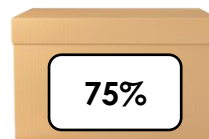
He says,



Box B contains the most oranges.



Box A



Box B



Box C

Is Marco correct? Explain your answer.



RPS
HW/Ext

Equivalent FDP

4. True or false? All the fractions below have been correctly converted to their equivalent decimals and percentages.

A. $\frac{4}{5} = 0.8 = 80\%$

B. $\frac{4}{10} = 0.4 = 40\%$

C. $\frac{5}{100} = 0.05 = 50\%$



VF
HW/Ext

5. Match the percentage to its equivalent decimal and fraction.

25%

0.6

$\frac{3}{5}$

60%

0.2

$\frac{2}{8}$

20%

0.25

$\frac{1}{5}$



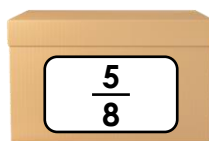
VF
HW/Ext

6. Jackson is comparing the amount of apples there are in the boxes below.

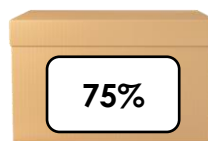
He says,



Box A contains the most apples.



Box A



Box B



Box C

Is Jackson correct? Explain your answer.



RPS
HW/Ext

Equivalent FDP

7. True or false? All the fractions below have been correctly converted to their equivalent decimals and percentages, and have been shown in their simplest form.

A. $\frac{13}{20} = 0.65 = 65\%$

B. $\frac{35}{100} = 0.35 = 35\%$

C. $\frac{4}{8} = 0.5 = 50\%$



VF
HW/Ext

8. Match the percentage to its equivalent decimal and fraction.

87.5%

0.375

$\frac{3}{20}$

37.5%

0.15

$\frac{7}{8}$

15%

0.875

$\frac{3}{8}$



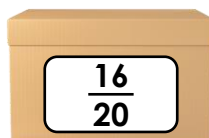
VF
HW/Ext

9. Katrina is comparing the amount of peaches there are in the boxes below.

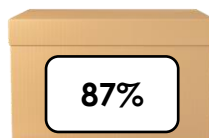
She says,



Only two boxes contain an equivalent amount of peaches to each other.



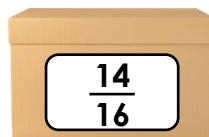
Box A



Box B



Box C



Box D



Box E

Is Katrina correct? Explain your answer.



RPS
HW/Ext

Homework/Extension

Equivalent FDP

Developing

1. False. B has not been converted correctly. $\frac{50}{100}$ (which can be simplified to $\frac{1}{2}$) is equivalent to 0.5, not 0.05.
2. 50%, 0.5, $\frac{1}{2}$; 75%, 0.75, $\frac{3}{4}$; 30%, 0.3, $\frac{3}{10}$.
3. Marco is incorrect. Box A and Box B both contain the same amount of oranges. This is because $75\% = 0.75 = \frac{3}{4}$. 0.75 and $\frac{3}{4}$ are greater than 0.7 so Box A and B contain more oranges than Box C.

Expected

4. False. C has not been converted correctly. $\frac{5}{100}$ is equivalent to 0.05, not 0.5.
5. 25%, 0.25, $\frac{2}{8}$; 60%, 0.6, $\frac{3}{5}$; 20%, 0.2, $\frac{1}{5}$.
6. Jackson is incorrect. Box B contains the most apples. This is because $75\% = 0.75 = \frac{3}{4}$. Box A has $\frac{5}{8} = 62.5\% = 0.625$ and Box C has $0.5 = 50\% = \frac{1}{2}$.

Greater Depth

7. False. Although all the fractions have been correctly converted, the fractions in B and C have not been simplified. B should be simplified to $\frac{7}{20}$ and C should be simplified to $\frac{1}{2}$.
8. 87.5%, 0.875, $\frac{7}{8}$; 37.5%, 0.375, $\frac{3}{8}$; 15%, 0.15, $\frac{3}{20}$.
9. Katrina is incorrect. Although Box A and Box E contain an equivalent amount of peaches, Box C and Box D also contain an equivalent amount to each other. This is because $\frac{16}{20}$ (which can be simplified to $\frac{4}{5}$) = 0.8 = 80%, and $\frac{14}{16}$ (which can be simplified to $\frac{7}{8}$) = 87.5% = 0.875.