Equivalent FDP

7a. Safeeyah says,



Six fortieths of my cake has been eaten so there is 0.85 or 85% left.

Do you agree?

Explain why.

GD

R

Equivalent FDP

7b. Jacob says,



Fourteen sixteenths of my cake has been eaten so there is 0.25 or 25% left.

Do you agree?

Explain why.

GD

R

8a. Jack scored 60% on his music exam.

Scarlett scored 26 out of 40.

Isaac expresses his result as a decimal, which is 0.65.

Who scored the highest?

Show your working out.

GD

PS

8b. Megan scored 85% on her tap exam.

Nate scored 14 out of 16.

Mo expresses his result as a decimal, which is 0.875.

Who scored the highest?

Show your working out.

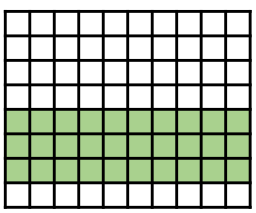
GD

PS

9a. James thinks that 30% of the squares are shaded.

Sam thinks that $\frac{3}{10}$ of the squares are shaded.

Adam thinks that 0.375 of the squares are shaded.



Who is correct? Explain your answer.

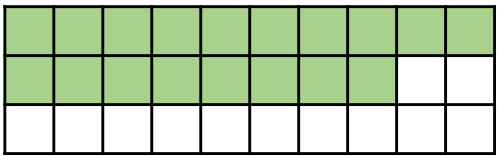
GD

R

9b. Isla thinks that 70% of the squares are shaded.

Ellie thinks that $\frac{9}{15}$ of the squares are shaded.

Hafsa thinks that 0.6 of the squares are shaded.



Who is correct? Explain your answer

GD

R

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Reasoning and Problem Solving Equivalent FDP

Developing

1a. No, there will be 75% left which is equivalent to 0.75 and $\frac{3}{4}$.

2a. Kim: 50% = 0.5 = $\frac{1}{2}$. Jane: $\frac{7}{10}$ = 70% = 0.7. Lucy: 0.6 = 60% = $\frac{6}{10}$. Jane ate the most.

3a. Morgan is correct. 80 out of 100 squares are shaded, which is equivalent to 80%, 0.8 or $\frac{8}{10}$.

Expected

4a. No, there will be 40% left which is equivalent to 0.4 and $\frac{2}{5}$.

5a. Joshua: 75% = 0.75 = $\frac{3}{4}$. Briony: $\frac{3}{5}$ = 0.6 = 60%. Verity: 0.8 = 80% = $\frac{3}{4}$. Verity scored the highest.

6a. Mia and Jasmine are both correct. 20 of the 50 squares are shaded, which is equivalent to 40%, $\frac{2}{5}$ and 0.4.

Greater Depth

7a. Yes, there will be $\frac{17}{20}$ left which is equivalent to 0.85 and 85%. This is because $\frac{6}{40}$ = $\frac{3}{20}$.

8a. Jack: 60% = 0.6 and $\frac{3}{5}$. Scarlett: $\frac{26}{40}$ = $\frac{13}{20}$, 0.65 and 65%. Isaac: 0.65 = 65% and $\frac{13}{20}$. Scarlett and Isaac both scored the highest.

9a. Adam is correct. 30 out of 80 squares are shaded, which is equivalent to 0.375, 37.5% and $\frac{3}{8}$.

Reasoning and Problem Solving Equivalent FDP

Developing

1b. Yes, there will be $\frac{7}{10}$ left which is equivalent to 0.7 and 70%.

2b. Nile: 75% = 0.75 = $\frac{3}{4}$. Max: $\frac{3}{4}$ = 75% = 0.75. James: 0.7 = 70% = $\frac{7}{10}$. Nile and Max both ate the most.

3b. Kelly is correct. 20 out of 100 squares are shaded, which is equivalent to 20%, 0.2 or $\frac{2}{10}$.

Expected

4b. Yes, there will be 37.5% left which is equivalent to 37.5 and $\frac{3}{8}$.

5b. Will: 60% = 0.6 = $\frac{3}{5}$. Kate: $\frac{5}{8}$ = 62.5% = 0.625. Holly: 0.6 = 60% = $\frac{3}{5}$. Kate scored the highest.

6b. Connie is correct. 12.5 out of 100 squares are shaded, which is equivalent to 12.5%, $\frac{1}{8}$ and 0.125.

Greater Depth

7b. No, there will be $\frac{1}{8}$ left which is equivalent to 0.125 and 12.5%. This is because $\frac{14}{16}$ = $\frac{7}{8}$.

8b. Megan: 85% = 0.85 and $\frac{17}{20}$. Nate: $\frac{14}{16}$ = $\frac{7}{8}$, 0.875 and 87.5%. Mo: 0.875 = 87.5% and $\frac{7}{8}$. Nate and Mo both scored the highest.

9b. Ellie and Hafsa are both correct. 18 out of 30 squares are shaded, which is equivalent to $\frac{9}{15}$ ($\frac{3}{5}$ when simplified), 60% and 0.6.

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