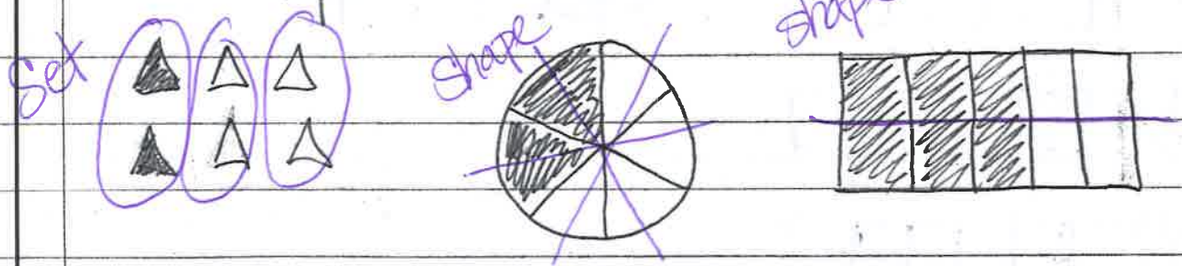
The answer key will be posted on our class website this weekend.

Answer Key

Practice Test for Fractions

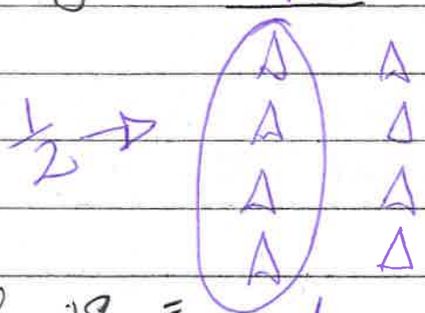
1. Write a fraction and an equivalent fraction to describe the shaded part of each shape or set.



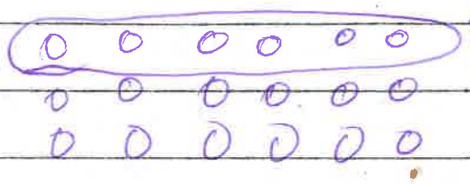
a) $\frac{2}{6}, \frac{1}{3}, \frac{4}{12}$ b) $\frac{2}{6}, \frac{1}{3}, \frac{4}{12}$ c) $\frac{3}{5}, \frac{6}{10}$

2. Find a fraction for each set. Draw a picture to show your thinking.

a) $\frac{1}{2}$ of 8 = 4



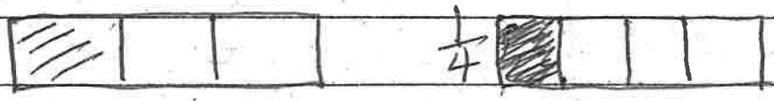
b) $\frac{1}{3}$ of 18 = 6



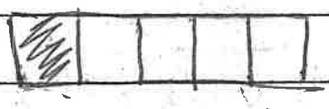
3. Order these fractions from least to greatest. Draw a picture and/or use words to explain your thinking.

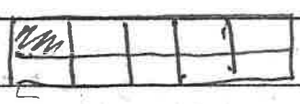
$\frac{1}{5}, \frac{1}{3}, \frac{1}{10}, \frac{1}{4}$

Pictures...

$\frac{1}{3}$ 

$\frac{1}{4}$

$\frac{1}{5}$ 

$\frac{1}{10}$ 

Explain your thinking...

The fractions are least to greatest are

$\frac{1}{10}, \frac{1}{5}, \frac{1}{4}, \frac{1}{3}$

because... I can see in my pictures that $\frac{1}{10}$ is clearly the least and $\frac{1}{3}$ is the most.

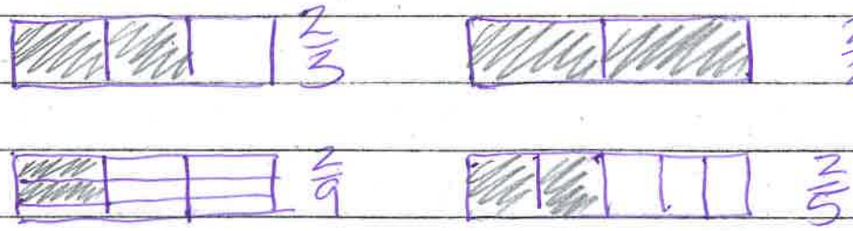
It is harder to tell if $\frac{1}{5}$ or $\frac{1}{4}$ is bigger but I know the larger the number in the denominator of a unit fraction, the smaller the pieces are. So $\frac{1}{5}$ pieces are smaller than $\frac{1}{4}$ pieces because you have 5 pieces not just 4.

4. Order these fractions from least to greatest.

Draw a picture and/or use words to explain your thinking.

$\frac{2}{3}$, $\frac{2}{9}$, $\frac{2}{2}$, $\frac{2}{5}$

Pictures...



Explain your thinking...

The fractions from least to greatest are

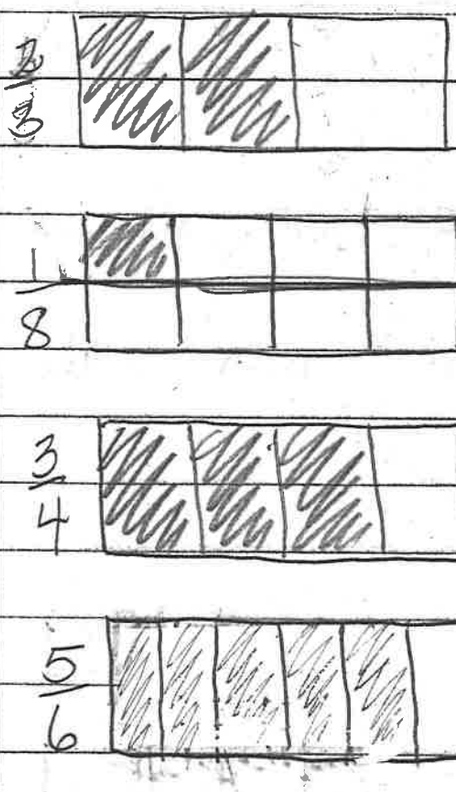
$\frac{2}{9}, \frac{2}{5}, \frac{2}{3}, \frac{2}{2}$

because...

$\frac{2}{2}$ is the same as 1 whole so it is the most.

Looking at the denominators because the numerators are all the same. The bigger the number in the denominator, means more pieces that are each smaller.

5. Draw a picture to show each fraction.



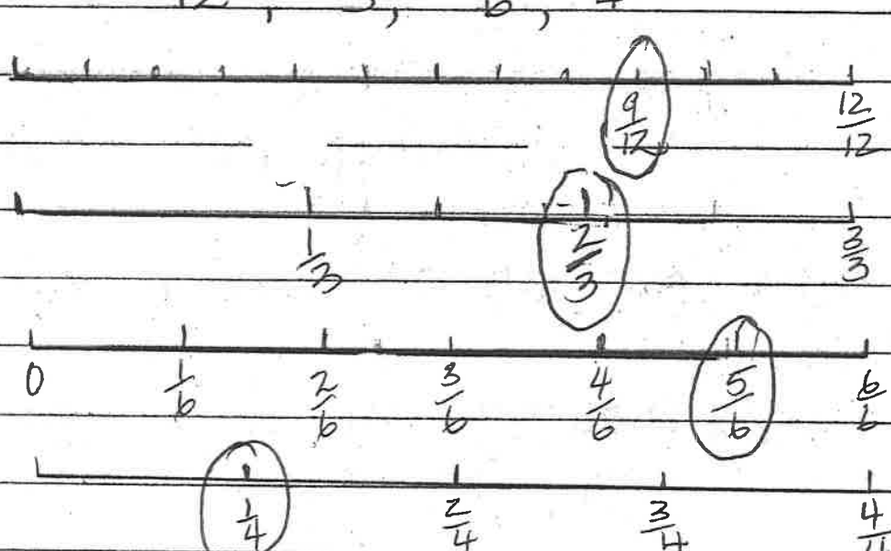
Which fraction is closest to 0? $\frac{1}{8}$

Which fraction is closest to 1? $\frac{5}{6}$

Which fraction is closest to $\frac{1}{2}$? $\frac{2}{3}$

6. Place the following fractions on the number lines below. (Hint: number line = 12 cm)

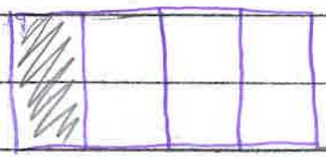
$\frac{9}{12}$, $\frac{2}{3}$, $\frac{5}{6}$, $\frac{1}{4}$

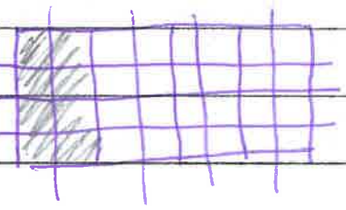


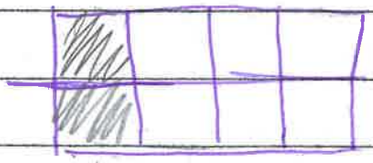
Order fractions from least to greatest:

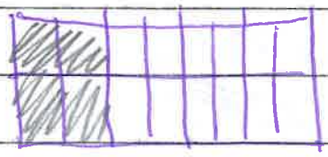
$\frac{1}{4}, \frac{2}{3}, \frac{9}{12}, \frac{5}{6}$

7. Give me at least 4 equivalent fractions for $\frac{1}{4}$. Draw a picture for each one.

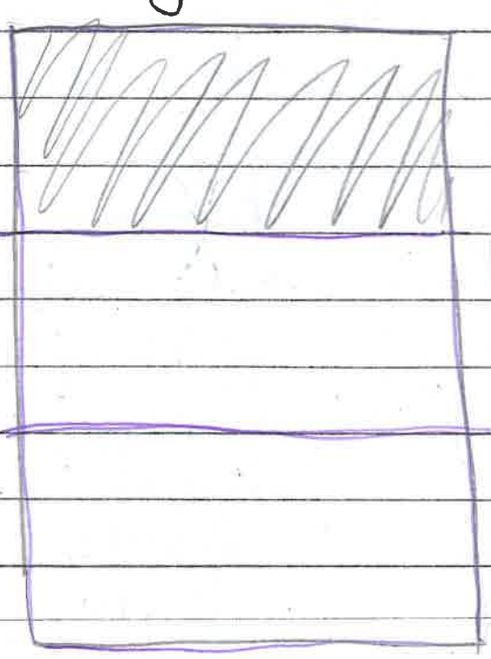
$\frac{1}{4}$ 

$\frac{8}{32}$ 

$\frac{1}{8}$ 

$\frac{4}{16}$ 

8. Explain how $\frac{1}{3}$ of a chocolate bar could be bigger or more than $\frac{8}{9}$ of a chocolate bar. Use pictures and words to explain your thinking.

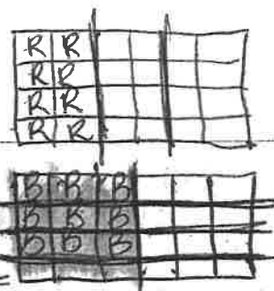
$\frac{1}{3}$ 

If the chocolate bars were the same size $\frac{8}{9}$ would be more. But if the bar divided into 3 equal parts is bigger $\frac{1}{3}$ could be more than $\frac{8}{9}$.

$\frac{1}{4}$ Y

Y	Y	Y	Y	Y	Y
R	R	R	R	B	B
R	R	B	B	B	B
R	R	G	B	B	B

R $\frac{1}{3}$



$\frac{3}{8}$ B

9. A mosaic has 24 tiles

		# of tiles
$\frac{1}{4}$ of 24	$\frac{1}{4}$ of them are yellow...	6 yellow
$\frac{1}{3}$ of 24	$\frac{1}{3}$ of them are red...	8 red
$\frac{3}{8}$ of 24	$\frac{3}{8}$ of them are blue...	9 blue

The rest of the tiles are ~~yellow~~ green.

6 + 8 + 9 = 23 tiles

What fraction of the tiles are ~~yellow~~ green?

Number of ~~yellow~~ green tiles 1

Fraction of ~~yellow~~ green tiles $\frac{1}{24}$

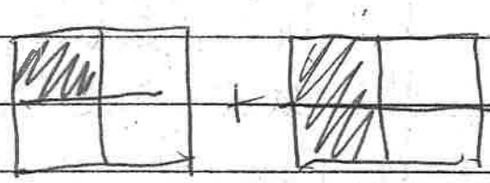
10. Add the following fractions:

a) $\frac{4}{9} + \frac{3}{9} = \frac{7}{9}$

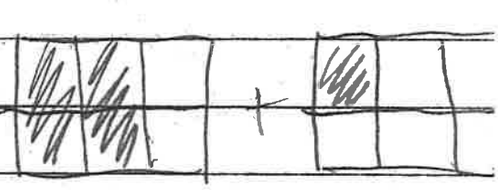
b) $\frac{4}{6} + \frac{2}{6} = \frac{6}{6} = 1$

c) $\frac{1}{4} + \frac{2}{4} = \frac{3}{4}$

d) $\frac{4}{6} + \frac{1}{6} = \frac{5}{6}$



$\frac{1}{2} = \frac{2}{4}$



$\frac{2}{3} = \frac{4}{6}$

11. The sum of two fractions is $\frac{8}{10}$.

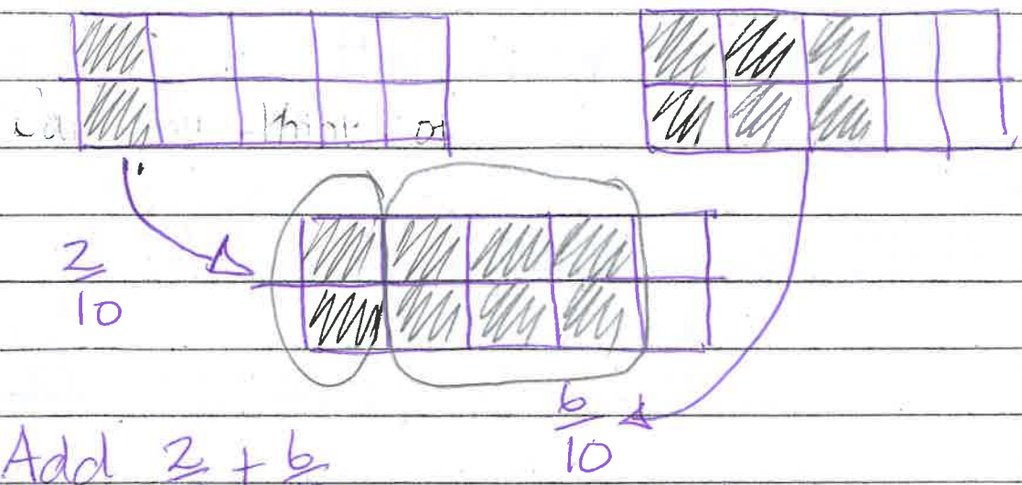
Option A:

What could the question be?

Explain your thinking. You can use pictures, number lines, words, etc.

One possible answer is:

$$\frac{2}{10} + \frac{6}{10} = \frac{8}{10}$$



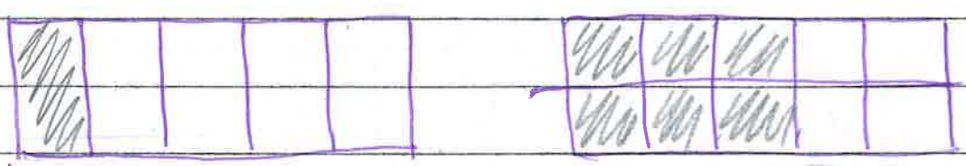
Add $\frac{2}{10} + \frac{6}{10}$ gives you $\frac{8}{10}$.

There are several possible solutions.

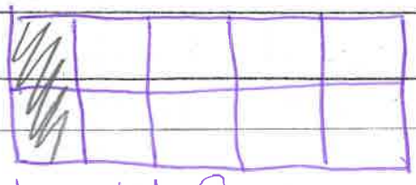
OR Option B: Can you think of question where the denominators are different? Explain your thinking...

$$\frac{1}{5} + \frac{6}{10} = \frac{8}{10}$$

Again, there are many possibilities.



$\frac{1}{5}$ is equivalent to $\frac{2}{10}$



So $\frac{1}{5}$ becomes $\frac{2}{10}$.

Add $\frac{2}{10} + \frac{6}{10} = \frac{8}{10}$.

You must add fractions with the same denominator called a common denominator

12. Write each fraction as a decimal

a) $\frac{43}{100} = 0.43$ b) $\frac{3}{10} = 0.3$

c) $\frac{6}{100} = 0.06$ d) $\frac{296}{1000} = 0.296$

e) Challenge: $\frac{4}{10}$ ~~$\frac{2}{5}$~~ $= 0.4$ or $\frac{2}{5} = \frac{40}{100} = 0.40$

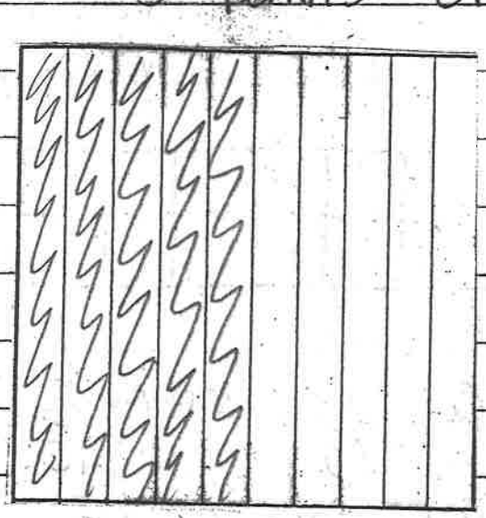
13. Write each decimal as a fraction

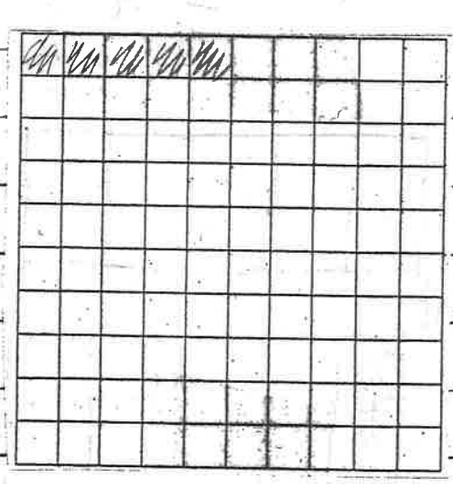
a) $0.6 = \frac{6}{10}$ b) $0.49 = \frac{49}{100}$

c) $0.05 = \frac{5}{100}$ d) $0.609 = \frac{609}{1000}$

14. Which decimal is the greatest,
a) 5 tenths or 5 hundredths?

$\frac{5}{10}$
0.5





$\frac{5}{100}$
0.05

Greatest decimal: 0.5 is greater (same as $\frac{50}{100}$ or 0.50)

Key for the Gr 4 problem.

15. Order these decimals, fractions and percents from least to greatest.

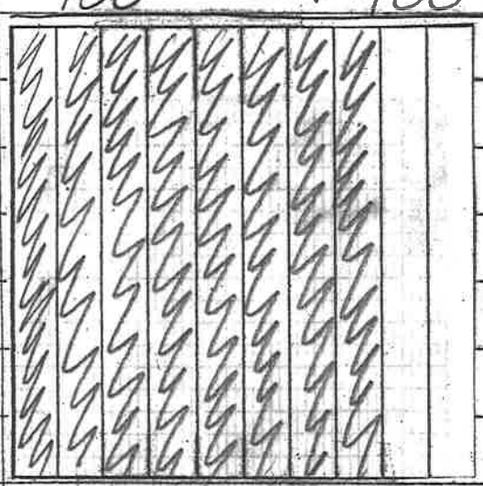
Hint: First change everything to fractions with denominators of 100. eg... $\frac{?}{100}$

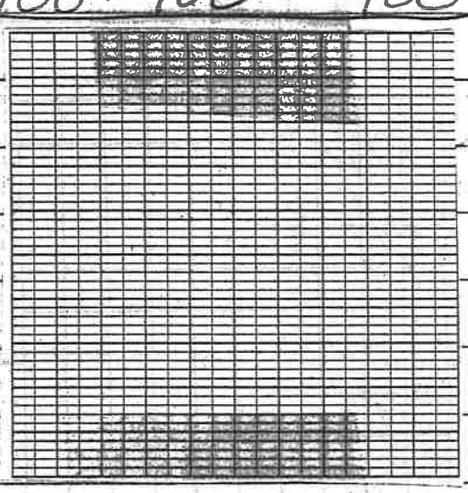
Gr 4 81%, 0.8, $\frac{1}{2}$, $\frac{5}{100}$, $\frac{6}{10}$

Gr 5 81%, 0.8, $\frac{1}{2}$, $\frac{5}{100}$, 0.600

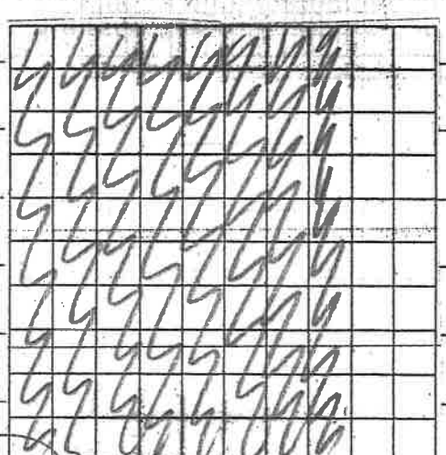
Fractions out of 100 ...

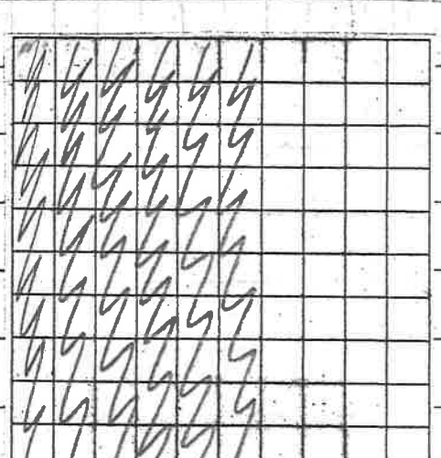
$\frac{81}{100}$ $\frac{80}{100}$ $\frac{50}{100}$ $\frac{5}{100}$ $\frac{60}{100}$





0.8 same as $\frac{80}{100}$ or 0.80





$\frac{6}{10} = \frac{60}{100}$

(Either way of reporting is fine.) least to greatest: $\frac{5}{100}$, $\frac{1}{2}$ or $\frac{50}{100}$, $\frac{6}{10}$ or $\frac{60}{100}$, 0.8 or $\frac{80}{100}$, 81% $\frac{81}{100}$

Key for the Gr 5 problem.

15. Order these decimals, fractions and percents from least to greatest.

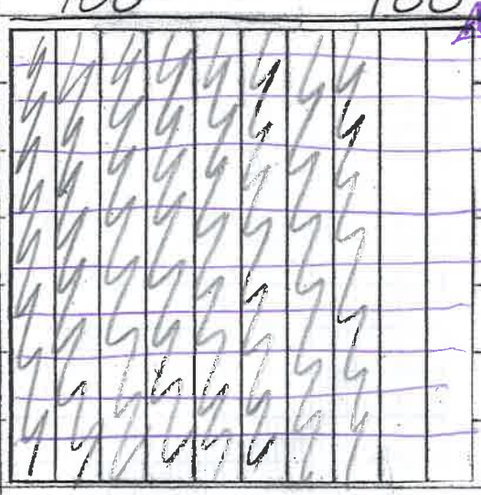
Hint: First change everything to fractions with denominators of 100 eg... $\frac{?}{100}$

Gr 4 81%, 0.8, $\frac{1}{2}$, $\frac{5}{100}$, $\frac{6}{10}$

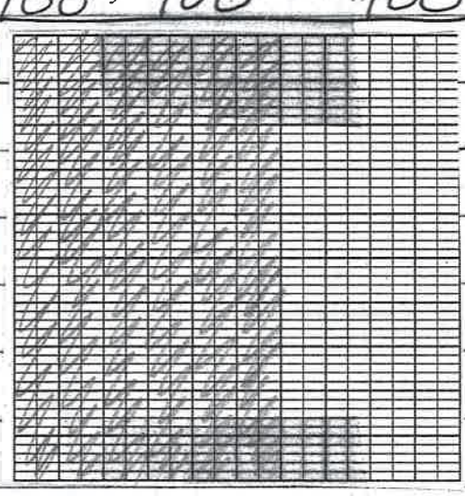
Gr 5 81%, 0.8, $\frac{1}{2}$, $\frac{5}{100}$, 0.600

Fractions out of 100...

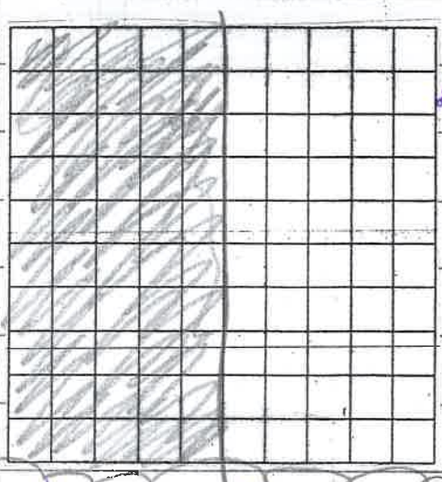
$\frac{81}{100}$ $\frac{80}{100}$ $\frac{50}{100}$ $\frac{5}{100}$ $\frac{60}{100}$



$0.8 = \frac{8}{10}$ Same as $\frac{80}{100}$



NB each column = 50



$\frac{1}{2} = \frac{50}{100}$

same as $\frac{60}{100}$

Either way to report the answer is fine.

Least to greatest: $\frac{5}{100}$ $\frac{1}{2}$ 0.600 0.8 81%

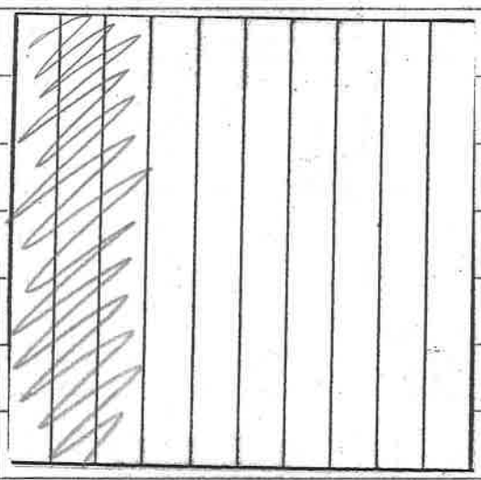
$\frac{5}{100}$, $\frac{50}{100}$, $\frac{60}{100}$, $\frac{80}{100}$, $\frac{81}{100}$

b) Change each fraction to a decimal.

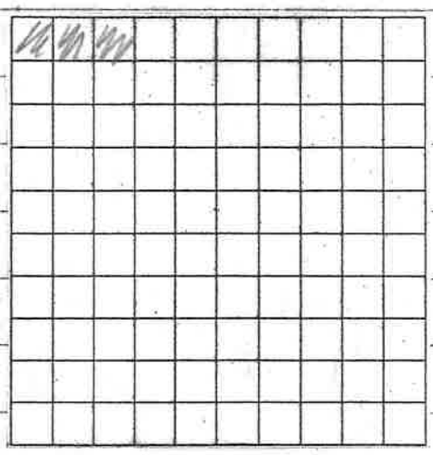
Circle the greatest decimal.

Gr 4 $\frac{3}{10} = 0.3$ $\frac{3}{100} = 0.03$

Gr 5 $\frac{36}{100} = 0.36$ $\frac{36}{1000} = 0.036$

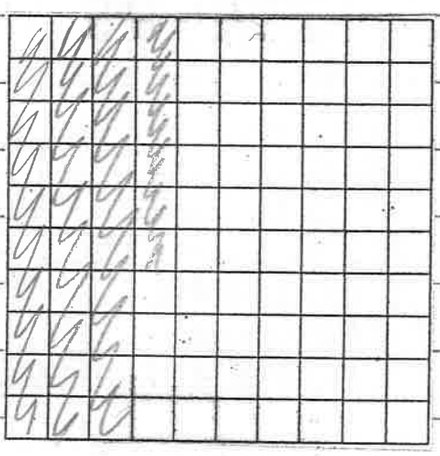


$\frac{3}{10} = 0.3$



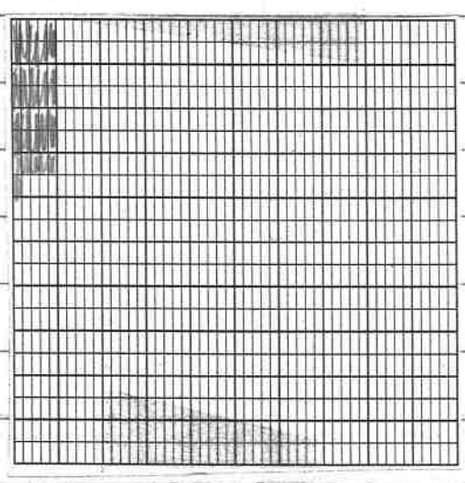
$\frac{3}{100} = 0.03$

tenths, hundredths



$\frac{36}{100} = 0.36$

tenths, hundredths



$\frac{36}{1000} = 0.036$

tenths, hundredths, thousandths