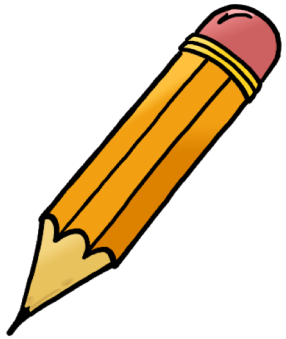
Year 6

Wednesday 10th June 2020

Maths

LO: ordering fractions, decimals and percentages.

Please note: this link only works on either pdf or the link above this powerpoint.
The video lesson is available here – Summer Term - Week 6 - lesson 3

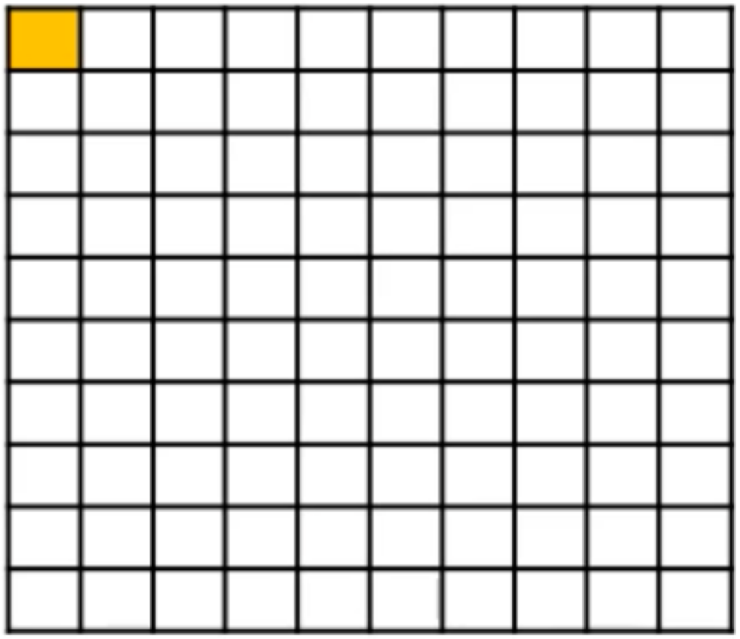


Brain Melter!

Can you get your car out of the very crowded car park by moving other cars forwards or backwards?

Check if your solution work here.

Re-cap



= one hundredth

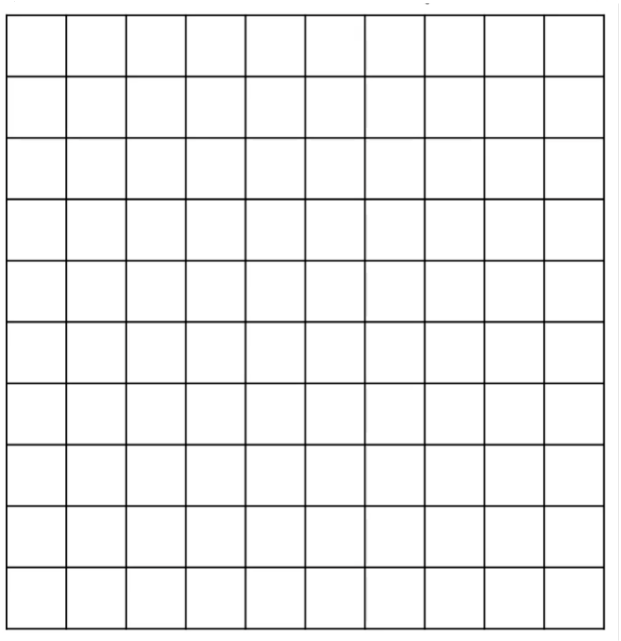
$= \frac{1}{100} = 0.01$

= 1 percent

'out of' 'one hundred'

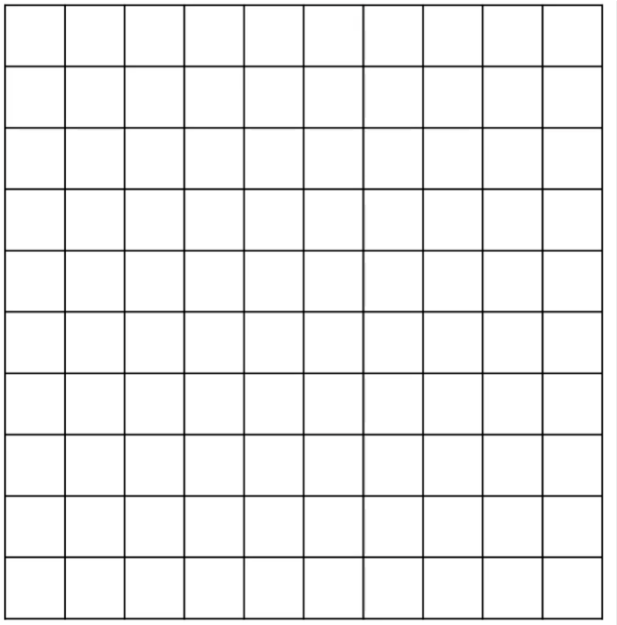
Using the 100 square can you order the **following fractions, decimals and percentages** from **smallest** to **largest**?

1: 0.97 95 % $\frac{3}{4}$



Click for answer

2: 0.62 59 % $\frac{3}{5}$



Click for answer

Another way to order would be to convert them all to fractions with the same denominator Look again at number 2. You have 62/100, 59/100 and 60/100.

Answers

1: 0.97 $95\,\%$ $\frac{3}{4}$

$\frac{3}{4}$ $95\,\%$ 0.97

2: 0.62 $59\,\%$ $\frac{3}{5}$

$59\,\%$ $\frac{3}{5}$ 0.62

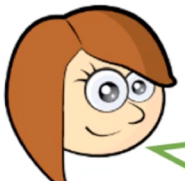
Another way to order would be to convert them all to fractions with the same denominator Look again at number 2. You have 62/100, 59/100 and 60/100.

Can you help Dora to explain?

Rosie and Dora are comparing

0.6 $\frac{2}{5}$ 11%

Have a go



Rosie

11 % is the largest, because 11 is the biggest number. $\frac{2}{5}$ is the smallest because 5 is the smallest number.

I don't think that's right, but I'm not sure how to explain it...

Dora

EXTENSION:

Order the following from smallest to greatest

$\frac{5}{20}$ 19% 0.18

Answers

Rosie

11 % is the largest, because 11 is the biggest number. $\frac{2}{5}$ is the smallest because 5 is the smallest number.

$$0.6 = \frac{6}{10}$$

$$\frac{2}{5} \overset{\times 2}{=} \frac{4}{10}$$

I don't think that's right, but I'm not sure how to explain it...

Dora

$$11\,\% = \frac{11}{100}$$

EXTENSION:

Order the following from smallest to greatest

$\frac{5}{20}$ 19 % 0.18

$$\frac{5}{20} \overset{\times 5}{=} \frac{25}{100}$$

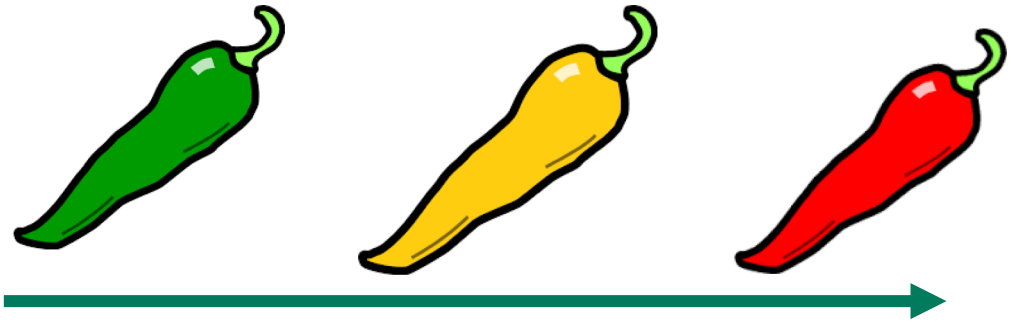
$$19\,\% = \frac{19}{100}$$

$$0.18 = \frac{18}{100}$$

0.18 19 % $\frac{5}{20}$

The independent work continues on the next two slides. There are 6 questions and 1 extension.

(Espanol - seis preguntas y una extensión)



Order FDP

1 Write <, > or = to complete the statements.

a) 64% ◯ 0.46

b) 0.96 ◯ $\frac{97}{100}$

c) $\frac{3}{5}$ ◯ 35%

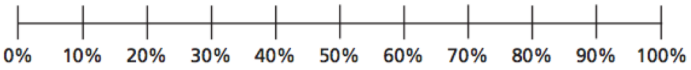
d) 0.8 ◯ 80%

e) 67% ◯ $\frac{7}{10}$

f) $\frac{7}{20}$ ◯ 0.3

2 Draw arrows to estimate the positions of the fractions, decimals and percentages on the number line.

a) 9% $\frac{9}{10}$ 0.99 19%



b) $\frac{2}{5}$ 0.52 45% 0.2

3 Write the fractions, decimals and percentages in ascending order.

a) $\frac{7}{10}$ $\frac{13}{100}$ 21% 0.9

b) 0.6 61% $\frac{37}{50}$ 0.66

c) 47% 0.89 $\frac{63}{100}$ 12%

d) Which part was easiest to order: a), b) or c)? _____

Why?

e) Which set was most difficult to order: a), b) or c)? _____

Why?

f) Compare answers with a partner.

What is the same and what is different?

4 These fractions, decimals and percentages are in descending order.

99% $\frac{89}{100}$ 0.7 [ ] 0.5 49%

Tick the fractions, decimals and percentages that could fill the gap.

0.78	51%	$\frac{3}{5}$	0.6	$\frac{4}{10}$

5 Tommy scored $\frac{40}{50}$ on a Maths test.

Aisha got 78% of the test correct.

Aisha thinks she has done better because 78 is greater than 40

Do you agree with Aisha? _____

Explain your answer.

_____

_____

6 Huan, Nijah and Scott each started with a 1-litre bottle of juice.

Huan drank 0.55 litres.

Nijah drank 59% of her juice.

Scott has $\frac{4}{10}$ of his juice left.

Who drank the most? Show your working.

_____ drank the most.

Who drank the least? Show your working.

_____ drank the least.

Ext:

a) Use the digit cards to make the statement correct.

1	2	3	4	5	6	7	8	9	10

$0.3 < \frac{\square}{10} < 80\%$

How many different solutions can you find?

_____

b) Use the digit cards to write a percentage greater than $\frac{2}{5}$ but less than 75%.

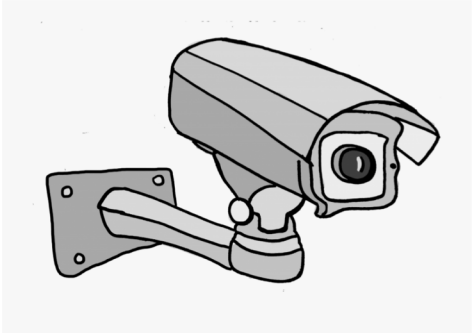
0	2	3	4	6	7

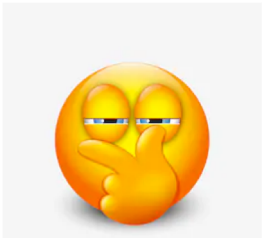
$\frac{2}{5} < \square < 0.75$

How many different percentages can you find?

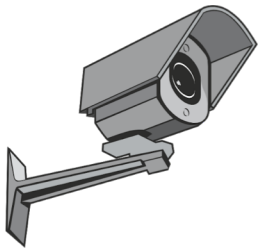
_____

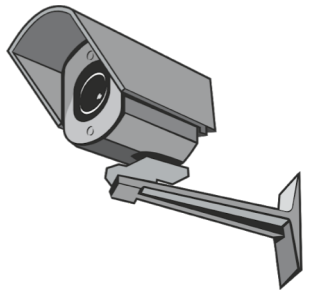
Compare answers with a partner.





The next two slides contain the answers should you wish to check you work and reflect on what you understand.





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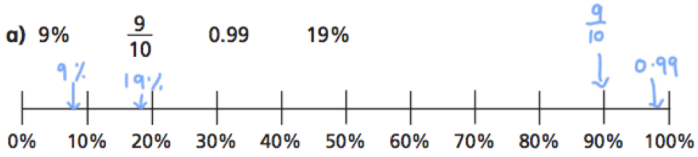

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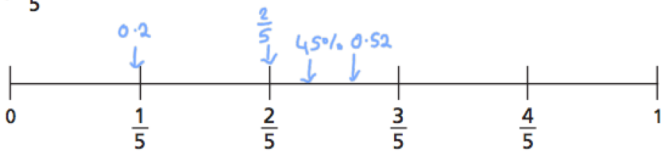

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$\frac{13}{100}$, 21%, $\frac{7}{10}$, 0·9

b) 0.6 61% $\frac{37}{50}$ 0.66

0·6, 61%, 0·66, $\frac{37}{50}$

c) 47% 0.89 $\frac{63}{100}$ 12%

12%, 47%, $\frac{63}{100}$, 0·89

d) Which part was easiest to order: a), b) or c)? _____

Why?

Various answers.

e) Which set was most difficult to order: a), b) or c)? _____

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5 Tommy scored $\frac{40}{50}$ on a Maths test.

Aisha got 78% of the test correct.

Aisha thinks she has done better because 78 is greater than 40

Do you agree with Aisha? No

Explain your answer.

$\frac{40}{50}$ = 80% and 80% > 78% so Tommy did better.

6 Huan, Nijah and Scott each started with a 1-litre bottle of juice.

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Scott drank the most.

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Huan drank the least.

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$0.3 < \frac{4}{10} < 80\%$

How many different solutions can you find?

Various answers.

b) Use the digit cards to write a percentage greater than $\frac{2}{5}$ but less than 75%.

0	2	3	4	6	7

$\frac{2}{5} < 0.43 < 0.75$

How many different percentages can you find?

Various answers.

Compare answers with a partner.