

## Group A – Maths

W/b 11.01.21

### Monday - Can I convert fractions into percentages and decimals when the denominator is not a factor of 100?

1 Work out the decimal equivalent for each of these fractions.

a  $\frac{1}{4}$       b  $\frac{2}{5}$       c  $\frac{7}{10}$       d  $\frac{6}{8}$       e  $\frac{3}{10}$   
f  $\frac{4}{5}$       g  $\frac{9}{10}$       h  $\frac{2}{8}$       i  $\frac{4}{20}$       j  $\frac{6}{16}$

Example

$$\frac{3}{4} = 3 \div 4 = 0.75$$

2 Copy this table.

Fraction	$\frac{1}{2}$	$\frac{1}{3}$	$\frac{1}{4}$	$\frac{1}{5}$	$\frac{1}{6}$	$\frac{1}{7}$	$\frac{1}{8}$	$\frac{1}{9}$	$\frac{1}{10}$
Decimal									

- Fill in the decimal equivalents you already know
- Calculate the decimal equivalents you did not know already, by dividing the denominator by the numerator.

E.g. to find  $\frac{1}{4}$ :  
 $4 \overline{)1} = 4 \overline{)1.25}$

a  $\frac{5}{8}$       b  $\frac{5}{11}$       c  $\frac{6}{6}$       d  $\frac{7}{12}$       e  $\frac{5}{9}$       f  $\frac{1}{13}$   
g  $\frac{6}{14}$       h  $\frac{3}{7}$       i  $\frac{11}{14}$       j  $\frac{6}{15}$       k  $\frac{9}{16}$       l  $\frac{13}{15}$

3.

Work out the decimal equivalents for the fractions  
Round each decimal to these degrees of accuracy:

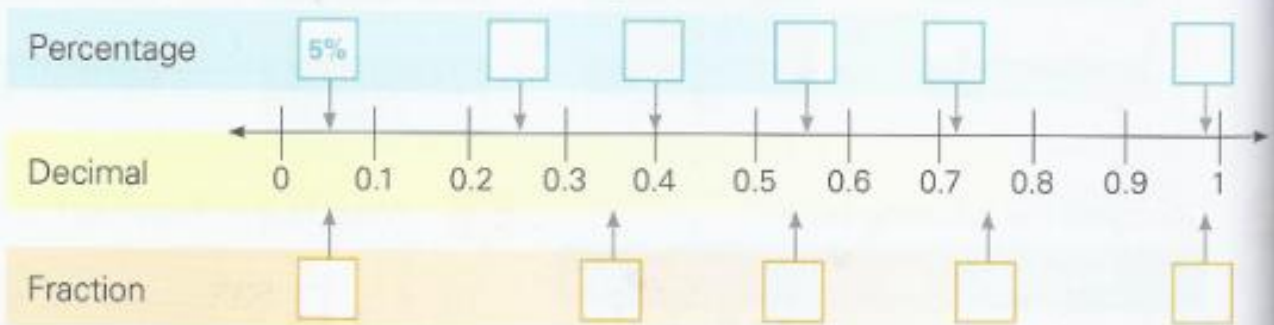
- 2 decimal places
- 3 decimal places

**Tuesday - Can fluently convert between fractions, decimals and percentages?**

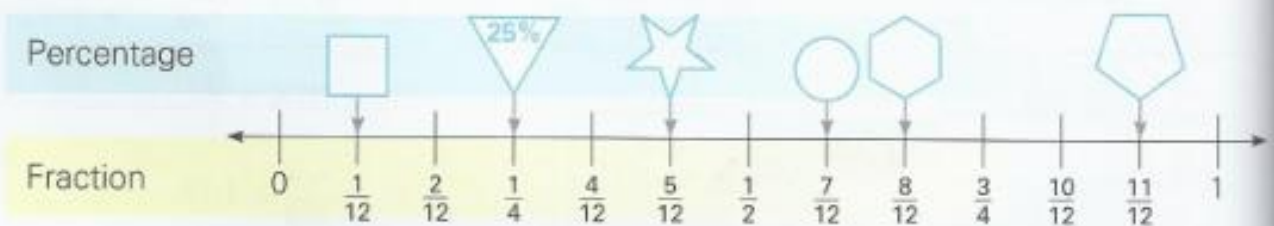
1. Complete the following table to find equivalent fractions, decimals and percentages.

Fraction (simplest form)	$\frac{3}{8}$			
Decimal		0.37		
Percentage			75%	49%

2 Fill in the blanks according to their position on this number line. If an arrow does not point to an exact decimal on the line, estimate its position. The first blank has been filled in for you—it is 5% of the way along the number line.



3 The triangle is 25% of the way along the number line. Choose the best estimate for the positions of the following shapes:



- a Square: 9%, 19%, 90% \_\_\_\_\_      b Star: 40%, 50%, 55% \_\_\_\_\_
- c Circle: 48%, 58%, 68% \_\_\_\_\_      d Hexagon: 56%, 66%, 76% \_\_\_\_\_
- e Pentagon: 81%, 91%, 99% \_\_\_\_\_

Wednesday - Can fluently order and compare fractions, decimals and percentages?

1.

Write these numbers in order of size.  
Start with the smallest number.

$\frac{1}{4}$  30%  $\frac{3}{8}$  0.2 0.17

73%  $\frac{2}{3}$  0.9  $\frac{3}{4}$  0.87

66%  $\frac{13}{20}$  0.606  $\frac{1}{2}$   $\frac{3}{5}$

0.82  $\frac{4}{5}$  85%  $\frac{2}{3}$   $\frac{7}{8}$

2.

Here are six numbers

75%  $\frac{8}{10}$   $\frac{9}{12}$  0.75  $66\frac{2}{3}\%$   $\frac{6}{8}$

Two of the numbers are **not** equal to  $\frac{3}{4}$

Draw a circle around each of the two numbers.

3.

True or False?

0.3 is bigger than  $\frac{1}{4}$ .

Explain your reasoning

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4. Put the FDP below into the following groups: < 50%, > 50% and = 50%

$\frac{3}{2}$ , 0.5, 1.25,  $\frac{3}{8}$ , 0.125, 75%

### Thursday – Can I solve word problems involving fractions, decimals and percentages?

1. There are some beads in a bag. The beads are red, yellow or blue.  
40% of the beads are blue.  
 $\frac{5}{10}$  of the beads are red.  
What percentage of beads are yellow?
2. There are 100 maltesers in a bag. 56 were eaten. How many are left?  
Write this as a fraction and a decimal.
3. There are 200 pieces of lego in a box. Theo uses 114 of them to build a robot. Write the amount he used as a percentage (out of 100).
4. Charlie divided 1 pizza into 5 pieces.  
If he ate 2 pieces, what percentage of the pizza did he eat?
5. There are 25 balls in a bag. There are 5 green balls and 10 blue balls. How many red balls are there? What is percentage of the balls in the bag are red?
6. Adam eats 16% of a pie, Gary eats 0.23 and Mary eats  $\frac{17}{50}$ , how much is left?

### Friday – Can I develop my Arithmetic skills?

In this session, we will work together on some key arithmetic skills. After the session, complete the Week 2 arithmetic test, which can be found in the Lockdown Home Learning area of the Valley website.

# Answers- Monday-Thurs

## MONDAY

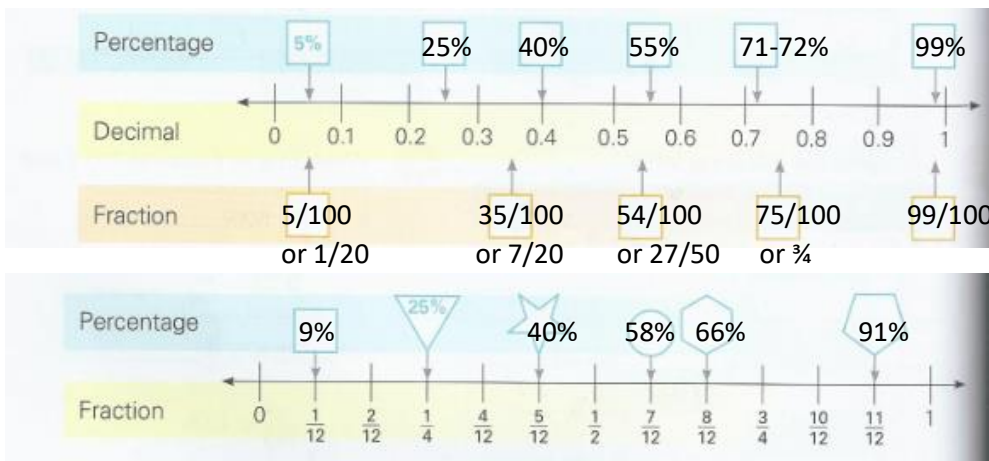
a) $\frac{1}{4} = 0.25$	b) $\frac{2}{5} = 0.4$	c) $\frac{7}{10} = 0.7$	d) $\frac{6}{8} = 0.75$	e) $\frac{3}{10} = 0.3$
f) $\frac{4}{5} = 0.8$	g) $\frac{9}{10} = 0.9$	h) $\frac{2}{8} = 0.25$	i) $\frac{4}{20} = 0.2$	j) $\frac{6}{16} = 0.375$

Fraction	$\frac{1}{2}$	$\frac{1}{3}$	$\frac{1}{4}$	$\frac{1}{5}$	$\frac{1}{6}$	$\frac{1}{7}$	$\frac{1}{8}$	$\frac{1}{9}$	$\frac{1}{10}$
Decimal	0.5	$0.3\dot{3}$	0.25	0.2	$0.1\dot{6}$	0.1428	0.125	$0.1\dot{1}$	0.1

a) 0.625 / 0.63	b) 0.45	c) 1	d) 0.58333 / 0.58	e) 0.5555 / 0.556 / 0.56	f) 0.0769 / 0.077 / 0.08
g) 0.4285 / 0.429 / 0.43	h) 0.4285 / 0.429 / 0.43	i) 0.7857 / 0.786 / 0.79	j) 0.4	k) 0.5625 / 0.563 / 0.56	l) 0.866666 / 0.867 / 0.87

## TUESDAY

Fraction (simplest form)	$\frac{3}{8}$	$\frac{37}{100}$	$\frac{3}{4}$	$\frac{49}{100}$
Decimal	0.375	0.37	0.75	0.49
Percentage	37.5%	37%	75%	49%



## WEDNESDAY

1.	0.17	0.2	$\frac{1}{4}$	30%	$\frac{3}{8}$
	$\frac{2}{3}$	73%	$\frac{3}{4}$	0.87	0.9
	$\frac{1}{2}$	$\frac{3}{5}$	0.606	$\frac{13}{20}$	66%
	$\frac{2}{3}$	$\frac{4}{5}$	0.82	85%	$\frac{7}{8}$

2.  $\frac{8}{10}$  & **66**  $\frac{1}{2}$  %
3. True –  $\frac{1}{4} = 0.25$  which is smaller than 0.3
4.  $< 50\% - \frac{3}{8} \quad 0.125$   
 $> 50\% - \frac{3}{2} \quad 1.25 \quad 75\%$   
 $= 50\% - 0.5$

## THURSDAY

1. 10%
2.  $\frac{44}{100} = \frac{22}{50} = \frac{11}{25}$   
0.44
3. 57%
4. 10 red balls = 40%
5. 27% or 0.27 or  $\frac{27}{100}$