

Sutton Maths Class

Year 4 - Week 19

Starter/Homework:

(Starred questions are optional)

1 Simplify:

a) $\frac{6}{9}$ b) $\frac{24}{160}$

2 Complete the following:

$$\frac{3}{8} = \frac{?}{40} = \frac{60}{?}$$

3 Convert the following to mixed numbers and simplify where possible:

a) $\frac{45}{3}$ b)* $\frac{152}{3}$

4* Find $\frac{2}{7}$ of 700kg.

Hint: change to grams to make it easier.

5 a) Find 40% of £350.
b) Find 12% of £700.

6 Decrease £800 by 5%.
Hint: change to pence if you need to.

7 Write $5\frac{4}{1000}$ as a decimal.

8 Round 5.89 to the nearest tenth.

9 Solve $9x - 10 = 53$ $x = \underline{\hspace{2cm}}$

10*** Solve $\frac{1}{4}x = 20$ $x = \underline{\hspace{2cm}}$

11* I think of a number, multiply by 5, subtract 10 and the answer is 50. What was the number?

12 a $9 - 11 =$
b $-2 - 12 =$
c* $5 - 35 =$
d* $-10 - 23 =$
e $-6 - 6 =$
f $0 - 15 =$
g* $2 - 100 =$

13 a $-5 \times -5 =$
b $-250 \div -50 =$
c $(-1)^2 =$
d** $-15 + -6 \times -10 =$
(don't forget BIDMAS)
e*** $(-8)^2 \div (-2)^2 =$

14* $(10 - 5)^2 + 16 \div 2^2 =$

15**** If $a = \frac{3}{5}$, $b = 10$ and
 $c = \frac{1}{3}$ find $a \times c \div b$.

16 Simplify:
a) $24 : 16$ b) $100 : 20$

17 Split £125 in the ratio 1:4.

18 List the factors of:
a) 30 b) 40

19* Draw a factor tree for 60.

20 a $\frac{2}{5} + \frac{1}{4} =$ b $\frac{2}{7} - \frac{2}{14} =$

c $\frac{5}{6} \times \frac{2}{3} =$ d $\frac{3}{4} \div \frac{3}{4} =$

Sutton Maths Class

- 21 Complete the following:
- a $0.01 \text{ kg} = \square \text{ g}$
 - b $3800 \text{ ml} = \square \text{ litres}$
 - c $7200 \text{ m} = \square \text{ km}$
 - d $0.9 \text{ cm} = \square \text{ mm}$
 - e* $0.492 \text{ m} = \square \text{ mm}$
 - f* $600 \text{ g} = \square \text{ kg}$
 - g* $293 \text{ ml} = \square \text{ litres}$
 - h** $11 \text{ mm} + 0.3 \text{ cm} = \underline{\hspace{1cm}} \text{ cm}$
 - i** $6 \text{ kg } 200 \text{ g} = \underline{\hspace{1cm}} \text{ kg}$

22** What fraction of 6 litres is 500ml?

23* Decrease 0.3 litres by 100ml. Give your answer in ml.

24* $300 \text{ ml} \times 6 = \underline{\hspace{2cm}} \text{ litres}$

25 Complete the following sequences:

a 1, 1, 2, 3, 5, 8, ,

b 8, 11, 14, 17, ,

c* 3, 1, -1, -3, ,

d* -10, -15, -20, -25, ,

e* 3, 4, 6, 8, 9, 12, 12, ,

f* 5, 7, 10, 14, 19, ,

26 Find the first four terms of the sequence with nth term $7n - 3$.

27* Find the 10th term of the sequence with nth term $9n + 1$.

28**** Find the 10th term of the sequences with nth term $2n^2$ (Don't forget BIDMAS).

29 The product of an odd number and an odd number is (odd/even)

30 List all three digit numbers you can make from the digits 9, 2, 5.

31 Calculate:

a 9^2 b*** $8^2 - 3^2$

c $\sqrt{16}$

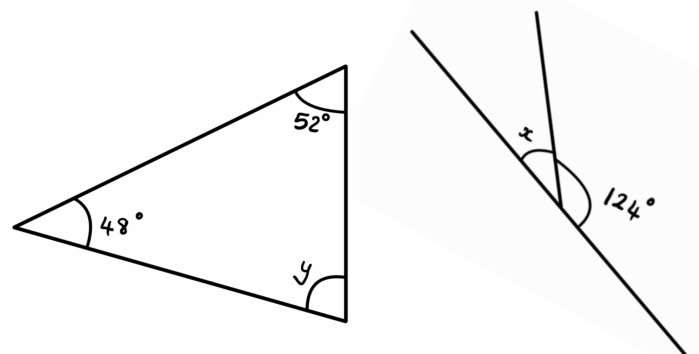
d*** $\sqrt{81} - \sqrt{9}$

32 What is the 9th square number?

33 What is the 4th triangular number?

34*** Calculate $10^2 - 2^3 + \sqrt{49}$

35 Find x and y :



Sutton Maths Class

Questions:

1 Convert the following **decimals to percentages**:

a	0.82	b	0.28
c	0.18	d	0.87
e	0.7	f	0.3
g	0.99	h*	0.125
i	0.4	j*	0.345
k	0.2	l	0.1
m	0.01	n*	0.001
o*	0.9316	p	0.5

2 Convert the following **percentages to decimals**:

a	74%	b	28%
c	12%	d	79%
e	3%	f	2%
g	80%	h	15%
i	20%	j	5%
k	8%	l	1%
m*	0.5%	n*	4.5%
o*	12.5%	p*	36.5%

3 Convert the following **percentages to fractions** (and simplify where possible):

a	30%	b	25%
c	66%	d	28%
e	10%	f	50%
g	80%	h	35%
i	48%	j	5%
k	1%	l	8%
m	17%	n	64%
o	15%	p***	0.5%

4 Convert the following **decimals to fractions** (you can convert to percentages first if you prefer):

a	0.25	b	0.18
c	0.65	d	0.34
e	0.98	f	0.99
g	0.32	h	0.6
i	0.9	j	0.2
k*	0.325	l	0.1
m	0.64	n*	0.05
o*	0.01	p*	0.125

5 Convert the following **fractions to decimals**:

a	$\frac{3}{10}$	b	$\frac{7}{10}$
c	$\frac{5}{10}$	d	$\frac{34}{100}$
e	$\frac{78}{100}$	f	$\frac{9}{10}$
g	$\frac{897}{1000}$	h	$\frac{375}{100}$
i*	$\frac{5}{100}$	j*	$\frac{35}{1000}$
k**	$\frac{1}{5}$	l**	$\frac{3}{5}$
m**	$\frac{17}{20}$	n**	$\frac{36}{50}$
o****	$\frac{1}{3}$	p****	$\frac{1}{8}$

Sutton Maths Class

6 Convert the following fractions to percentages:

a $\frac{7}{10}$

b $\frac{2}{10}$

c $\frac{9}{10}$

d $\frac{32}{100}$

e $\frac{88}{100}$

f $\frac{1}{10}$

g* $\frac{550}{1000}$

h $\frac{30}{100}$

i* $\frac{5}{100}$

j* $\frac{35}{1000}$

k** $\frac{1}{5}$

l** $\frac{2}{5}$

m** $\frac{4}{20}$

n** $\frac{35}{50}$

o**** $\frac{1}{3}$

p**** $\frac{1}{8}$

7 Use the quickest method to find:

a 20% of £400

b $33\frac{1}{3}\%$ of 600kg

c 0.3 x 800

d* 12.5% of 1600g
(use Q2, o for the easiest method)

e $66\frac{2}{3}\%$ of £120

f 10% of 60ml

g** 0.125 x 16
(use Q4,p for the quickest method)

7 Convert the following to the equivalent stated in the brackets:

a 60% (fraction)

b $\frac{4}{5}$ (percentage)

c 0.12 (fraction)

d 20% (decimal)

e 0.48 (percentage)

f $\frac{19}{20}$ (percentage)

g 85% (fraction)

h** $\frac{2}{40}$ (decimal)

i 0.08 (percentage)

j 19% (decimal)

k** 0.2 x 0.4 (answer as a fraction)

l $\frac{1}{2} \times \frac{2}{5}$ (decimal)

Sutton Maths Class

8 Complete the table below:

Fraction	Decimal	%
$\frac{1}{2}$		50%
	0.25	
		75%
$\frac{1}{10}$		
		1%
		20%
$\frac{1}{3}$		
	0.125	

10*** Use your answers to question 9 to find the following as decimals:

a	$\frac{5}{9}$	b	$\frac{3}{8}$
c	$\frac{2}{7}$	d	$\frac{5}{12}$
e	$\frac{3}{14}$	f	$\frac{5}{6}$

9**** Use bus stop to convert the following to decimals:

a	$\frac{1}{9}$	b	$\frac{1}{8}$
c	$\frac{1}{7}$	d	$\frac{1}{12}$
e	$\frac{1}{14}$	f	$\frac{1}{6}$