

Sutton Maths Class

Year 4 - Week 31

Starter/Homework:

(Starred questions are optional)

1 Simplify:

a) $\frac{56}{63}$ b) $\frac{125}{625}$

2 Complete the following:

$$\frac{8}{11} = \frac{?}{33} = \frac{56}{?}$$

3 Convert $\frac{56}{3}$ to mixed number.

4 Find $\frac{2}{7}$ of 490kg.

5 Find 45% of £300.

6* Increase 5kg by 20%.

7 Write $18\frac{73}{1000}$ as a decimal.

8 Round 72.38 to the nearest tenth.

9 Solve $9x - 1 = 80$ $x = \underline{\quad}$

10**** Solve $\frac{x}{10} = 5$ $x = \underline{\quad}$

11** I think of a number, multiply by 12, subtract 5 and the answer is 31. What was the number?

12 a $4 - 20 =$
b* $-91 - 7 =$
c $-9 - 73 =$
d $0 - 512 =$
e* $1 - 50 =$

13 a* $-800 \times -20 =$

b* $-60 \div -30 =$

c*** $(-20)^2 =$

d**** $40 + 60 \div -2 =$
(don't forget BIDMAS)

e**** $(-10)^2 \times 2^5 + 10^2 =$

14**** $7 + (4 - 1)^3 \div 9 =$

15**** If $f = 0.5$ and $g = -10$ find:

a fg

b $g^2 + f^2$

c**** $(fg)^2$

d**** fg^2

16 Simplify 700:75

17 Split £8000 in the ratio 1:3.

18 List the factors of 14.

19 Draw a factor tree for 50.

20*** a $\frac{5}{6} + \frac{2}{3} \times \frac{1}{8} =$

21 Complete the following:

a $0.2 \text{ cm} = \square \text{ mm}$

b $0.319 \text{ m} = \square \text{ mm}$

c $9700 \text{ g} = \square \text{ kg}$

d $910 \text{ ml} = \square \text{ litres}$

22*** What fraction of £5000 is 50p?

23 Complete the next two terms in the following sequence:

3, 3, 6, 9, 15, 24, $\underline{\quad}$, $\underline{\quad}$

24**** Find the first four terms of the sequence with nth term $7 - n$.

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- 25 Calculate:
- a $50^2 - 20^2$
- b** $10^2 - \sqrt{9} + 4^2$
- 26 Convert the following:
- a 0.86 (percentage)
- b** 52.5% (decimal)
- c 40% (decimal)
- d 0.7 (percentage)
- e 60% (fraction)
- f 28% (fraction)
- g 0.25 (fraction)
- h*** 0.723 (percentage)
- i*** 0.923 (fraction)
- j** 7% (decimal)
- 27 Calculate:
- a $0.2 \times 0.03 =$
- b**** $800 \div 0.8 =$
- c*** $4 \div 0.5 =$
- d***** $(0.03)^2 =$
- e***** $-200 \times -0.4 =$
- 28 Write the **nth term** of the sequence:
6, 8, 10, 12, 14
- 30***** Write the nth term of the sequence
14, 12, 10, 8, 6
- 30 Find the mean, mode, median and range of:
6, 9, 2, 9, 4
- 31 Write CCLXXXI as a natural number.
- 32 Write 79 in Roman numerals.
- 33 A fair dice is thrown. What is the probability that it lands on a factor of 20?
- 35 The probability that a fair coin thrown will land on a heads is 50%, true or false? Explain why.

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Divisibility Tests

Whole numbers are divisible by:

10	IF	the least digit is 0
100	IF	the last two digits are 00
2	IF	the last digit is even
3	IF	the sum of the digits is divisible by 3
4	IF	the last two digits are divisible by 4
5	IF	the last digit is either 0 or 5
6	IF	the number is BOTH even AND divisible by 3
8	IF	the last three digits are divisible by 8
9	IF	the sum of ALL digits is divisible by 9

Questions:

1 Which of the following are divisible by 100, 2, 4, 5 and 10:

a	400	b	50
c	350	d	3000
e	41	f	90
g	385	h	158
i	579	j	132
k	64	l	805
m	708	n	111
o	239	p	154
q	180	r	625
s	28	t	500
u	30	v	46
w	240	x	3184
y	54205	z	31953

2 True or false?

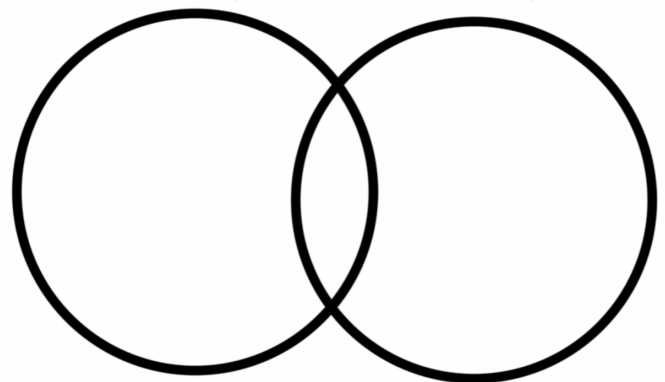
- a 252 is divisible by 3
- b 75 is divisible by 4
- c 4842 is divisible by 9
- d 821 is divisible by 6
- e 4875 is divisible by 25
- f 1064 is divisible by 8
- g 1812 is divisible by 9
- h 282 is divisible by 3
- i 4255 is divisible by 25

3 Place the following numbers in the Venn diagram below:

27. 45. 180. 40. 432. 450. 63

Divisible by 9

Divisible by 4



4 Complete the table writing ticks to show divisibility.

	Divisible by					
	3	5	6	9	25	100
274						
135						
1800						
275						
3663						
1263						
4500						
2916						
675						
5122						