

Mini Murder Mystery

Fractions, decimals & percentages

Who

One of the 4 characters below has murdered Mrs X. Analyse the number problems to discover the murderer.

Each one has said which of the numerical statements they believe are true or false. The innocent people have only made 1 or 2 errors. The guilty person has made 3 errors.

- A) 40% of 500 is 200
B) Half of 390 is 180
C) 0.6 is the same as 6%
D) 0.25 is the same as 2.5

- E) $0.6 \times 300 = 50$
F) $\frac{3}{4} \times 90 = 60$
G) Half of $\frac{8}{10}$ is $\frac{4}{5}$
H) 0.085 is the same as $8\frac{1}{2}\%$

The mad scientist said

- A is true
C is true
D is false
H is true



The silly boy said

- E is true
G is false
B is false
D is false



The chef said

- G is false
C is true
D is true
F is true



The artist said

- D is true
C is false
E is true
B is false



Where

The murder took place where these are in ascending order

0.109 , $\frac{1}{10}$, 11% , $\frac{90}{1000}$, 0.099

Nottingham if this order is correct

$\frac{90}{1000}$, 0.099 , $\frac{1}{10}$, 0.109 , 11%

Derby if this order is correct

0.109 , 0.099 , $\frac{1}{10}$, $\frac{90}{1000}$, 11%

Sheffield if this order is correct

11% , 0.109 , $\frac{1}{10}$, 0.099 , $\frac{90}{1000}$

Leicester if this order is correct

$\frac{1}{10}$, $\frac{90}{1000}$, 11% , 0.099 , 0.109

When Calculate each answer to find the time and date		
Add these fractions together $\frac{5}{8} + 2\frac{1}{6} =$	A) $2\frac{6}{14}$ The time was 6:14 pm	B) $2\frac{19}{24}$ The time was 19:24
	C) $2\frac{6}{24}$ The time was 6:24 pm	D) $\frac{18}{14}$ The time was 8:14 pm
Subtract these fractions $2\frac{2}{5} - \frac{7}{10} =$	A) $1\frac{1}{10}$ The date was 1/1/10	B) $1\frac{3}{10}$ The date was 1/3/10
	C) $1\frac{7}{10}$ The date was 1/7/10	D) $3\frac{7}{10}$ The date was 3/7/10

Why. Decode the message to find out why Mrs X was killed				
a	b	c	d	e
$20 \div 0.5$	$1.8 \times \frac{1}{2}$	$4.5 + 6.5$	$36 \times \frac{3}{4}$	$3 \div \frac{1}{4}$
f	g	h	i	j
$\frac{2}{5} \times 15$	$\frac{3}{10} \times 5$	$3\frac{7}{8} + 1\frac{1}{8}$	0.95×2	Half of 66
k	l	m	n	o
$\frac{7}{12} - \frac{1}{6}$	$6 \div \frac{1}{5}$	$\frac{1}{4} \times 2 \times 2$	0.7×0.7	$\frac{5}{8} \times 4$
p	q	r	s	t
5% of 40	26% as a decimal	15% of 50	$\frac{1}{4} \times \frac{4}{5}$	10% of 36
u	v	w	x	y or z
$3 \div \frac{3}{4}$	$1.5 \div 2$	$4 - 3\frac{3}{4}$	$\frac{3}{5}$ of 30	$1\frac{1}{2} \times 6$

$\frac{1}{5}$	5	12	27	1.9	27	0.49	3.6	30	1.9
$\frac{5}{12}$	12	6	7.5	40	11	3.6	1.9	2.5	0.49
$\frac{1}{5}$	40	0.49	27	1.9	30	2.5	0.75	12	3.6
5	12	1							

Final Accusation	
Who	
Where	
When	
Why	

