|  |  |
| --- | --- |
| **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 x 300 = 50  F) ¾ x 90 = 60  G) Half of is  H) 0.085 is the same as 8½% |
| http://2.bp.blogspot.com/_9r8gnBhOijs/TAytLShCDKI/AAAAAAAABFA/8Ngd6C7_qss/s1600/78873-Royalty-Free-RF-Clipart-Illustration-Of-A-Caucasian-Cartoon-Dentist-Man-Holding-An-Extracted-Tooth.jpgThe mad scientist said  A is true  C is true  D is false  H is true | http://images.clipartof.com/small/439618-Royalty-Free-RF-Clip-Art-Illustration-Of-A-Cartoon-Arrogant-Boy-Making-Funny-Faces.jpgThe silly boy said  E is true  G is false  B is false  D is false |
| http://t3.gstatic.com/images?q=tbn:ANd9GcTKTCfoMBqUwBQoGqwwVmF3sFZaZGiU0PNdpSPQhueQnwWYrBIT&t=1The chef said  G is false  C is true  D is true  F is true | http://images.clipartof.com/small/439548-Royalty-Free-RF-Clip-Art-Illustration-Of-A-Cartoon-Smiley-Face-Artist.jpgThe 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, , 11% , , 0.099 | |
| Nottingham if this order is correct | , 0.099, , 0.109, 11% |
| Derby if this order is correct | 0.109, 0.099, , , 11% |
| Sheffield if this order is correct | 11% , 0.109, , 0.099, |
| Leicester if this order is correct | , , 11% , 0.099, 0.109 |

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **When**  Calculate each answer to find the time and date | | | | | | | | | | | | | | | | |
| Add these fractions together  + 2 = | | | | | | | | A) 2  The time was 6:14 pm | | | | | B) 2  The time was 19:24 | | | |
| C) 2  The time was 6:24 pm | | | | | D)  The time was 8:14 pm | | | |
| Subtract these fractions  2 - = | | | | | | | | A) 1  The date was 1/1/10 | | | | | B) 1  The date was 1/3/10 | | | |
| C) 1  The date was 1/7/10 | | | | | D) 3  The date was 3/7/10 | | | |
| Why. Decode the message to find out why Mrs X was killed | | | | | | | | | | | | | | | | |
| **a** | | | **b** | | | **c** | | | | | **d** | | | | **e** | |
| 20 ÷ 0.5 | | | 1.8 x ½ | | | 4.5 + 6.5 | | | | | 36 x ¾ | | | | 3 ÷ ¼ | |
| **f** | | | **g** | | | **h** | | | | | **i** | | | | **j** | |
| x 15 | | | x 5 | | | 3⅞ + 1⅛ | | | | | 0.95 x 2 | | | | Half of 66 | |
| **k** | | | **l** | | | **m** | | | | | **n** | | | | **o** | |
| - | | | 6 ÷ | | | ¼ x 2 x 2 | | | | | 0.7 x 0.7 | | | | ⅝ x 4 | |
| **p** | | | **q** | | | **r** | | | | | **s** | | | | **t** | |
| 5% of 40 | | | 26% as a decimal | | | 15% of 50 | | | | | ¼ x | | | | 10% of 36 | |
| **u** | | | **v** | | | **w** | | | | | **x** | | | | **y or z** | |
| 3 ÷ ¾ | | | 1.5 ÷ 2 | | | 4 - 3¾ | | | | | of 30 | | | | 1½ x 6 | |
|  | | | | | | | | | | | | | | | | |
|  | 5 | | | 12 | 27 | | 1.9 | | 27 | 0.49 | | 3.6 | | 30 | | 1.9 |
|  |  | | |  |  | |  | |  |  | |  | |  | |  |
|  | 12 | | | 6 | 7.5 | | 40 | | 11 | 3.6 | | 1.9 | | 2.5 | | 0.49 |
|  |  | | |  |  | |  | |  |  | |  | |  | |  |
|  | 40 | | | 0.49 | 27 | | 1.9 | | 30 | 2.5 | | 0.75 | | 12 | | 3.6 |
|  |  | | |  |  | |  | |  |  | |  | |  | |  |
| 5 | 12 | | | 1 |  | |  | |  |  | |  | |  | |  |
|  |  | | |  |  | | | | | | | | | | | |
| Final Accusation | | | | | | | | | | | | | | | | |
|  | |  | | | | | | | | | | | | | | |
| Who | |  | | | | | | | | | | | | | | |
| Where | |  | | | | | | | | | | | | | | |
| When | |  | | | | | | | | | | | | | | |
| Why | |  | | | | | | | | | | | | | | |