Murder at the Movies

Suddenly and without warning, on a quiet night at the cinema, a body is discovered outside Screen 3. The cinema staff know that no one has left the building – so the murderer is one of the customers watching a film. As the Detective Chief Inspector, it is your job to solve the crime.

Your officers have compiled a list of the suspects in attendance at the cinema. You must use this list of cinema goers and the clues on the following pages to determine who has committed this terrible crime. Eliminate those who could not have committed the crime as you go by cross referencing the information you discover. As Sherlock Holmes said, 'When you have eliminated the impossible, whatever remains, however improbable, must be the truth'.

Accuracy and care could make the difference between identifying the culprit and arresting someone innocent. Good luck!
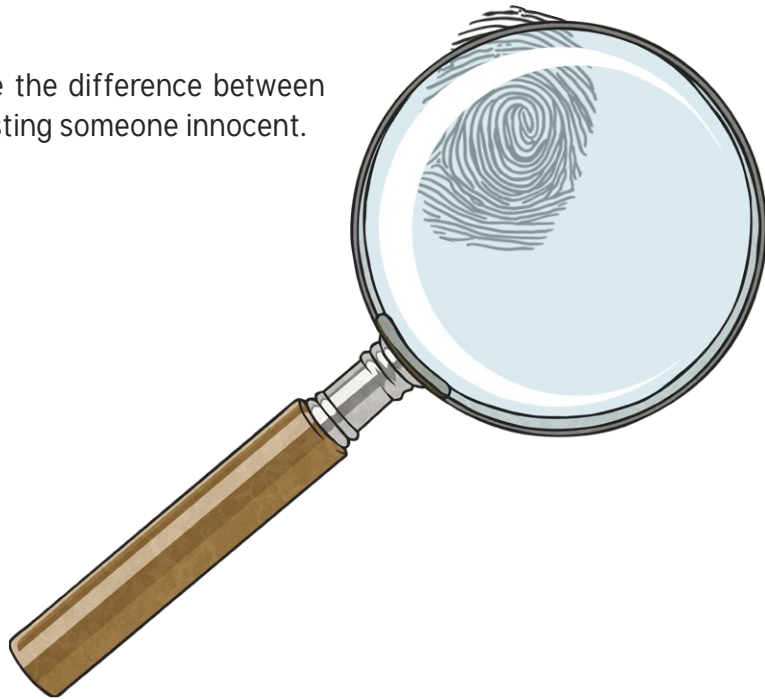
Table of Suspects

Name	Age	Male/Female	L/R Handed	Favourite Type of Film	Hair Colour	√ or X
Tabitha Carvery	44	Female	Right	Romantic Comedy	Brown	
Barney Lukeson	18	Male	Right	Western	Blonde	
Hania Hightower	31	Female	Left	Science Fiction	Blonde	
Jasper McNiel	76	Male	Right	Science Fiction	Grey	
Erma McGuire	34	Female	Left	Science Fiction	Red	
Silvia Sloane	102	Female	Left	Western	Grey	
Kerrie Langley	39	Female	Right	Romantic Comedy	Brown	
Masterman Bell	35	Male	Right	Romantic Comedy	Blonde	
Angus Smith	27	Male	Left	Science Fiction	Red	
Berniece Lowry	29	Female	Right	Romantic Comedy	Blonde	
Rylee Stringer	28	Female	Left	Western	Brown	
Rowley Butler	43	Male	Left	Science Fiction	Brown	
Barry McNaughton	45	Male	Right	Western	Black	
Asia Bobienski	69	Female	Right	Romantic Comedy	Red	
Sarita Blackwood	71	Female	Left	Romantic Comedy	Brown	
Witek Turnbull	54	Male	Right	Science Fiction	Brown	
Melissa Forest	34	Female	Left	Romantic Comedy	Blonde	
Russell Heath	57	Male	Left	Science Fiction	Grey	
Jayma Stanley	33	Female	Right	Western	Black	
Darius Christopher	24	Male	Left	Romantic Comedy	Red	
Amalia Clifford	35	Female	Right	Western	Blonde	
Jasmina Todd	53	Female	Left	Science Fiction	Brown	
Zoe Dickinson	82	Female	Right	Western	Grey	
David Parry	47	Male	Right	Romantic Comedy	Black	
Luis Mendoza	38	Male	Left	Romantic Comedy	Brown	
Korrinne Szwedko	21	Female	Right	Science Fiction	Black	
Huda Ali	30	Female	Left	Western	Black	
Blake Cantrell	36	Male	Left	Western	Brown	
Jemima Thorpe	27	Female	Right	Romantic Comedy	Blonde	
Lynn Gallivan	41	Female	Left	Romantic Comedy	Black	
Rick Victory	35	Male	Right	Science Fiction	Red	
Bethney Tinker	26	Female	Left	Western	Blonde	

Zero in on the Murderer!

Murder Mystery: Clue 1

Once you have worked out the clue, use the column in the table of suspects to cross out and eliminate suspects. After you have worked through all the clues, you will have one final suspect. This suspect is the murderer!

Fill in the missing number which is either 10, 100 or 1000 in each case. When you have filled in all of the missing numbers, count the number of 0s you have added in and match it up to the appropriate clue from the table. Eliminate from your inquiry any people in the cinema who have either of those letters in their names.

1. _____ x 40 = 400

2. 100 x 10 = _____

3. 3.4 x _____ = 34

4. 0.1 x _____ = 1

5. 345 ÷ _____ = 0.345

6. 0.05 x _____ = 5

7. 1000 ÷ 1 = _____

8. 2.8 ÷ _____ = 0.28

9. 236 x _____ = 23 600

10. 32 000 ÷ _____ = 320

11. 3.0002 x _____ = 3000.2

12. 450 ÷ 45 = _____

13. _____ x 0.86 = 86

14. _____ ÷ 10 = 10

15. 972 ÷ _____ = 97.2

16. 204.9 ÷ _____ = 0.2049

B, X	F, D	O, S	M, I	V, K	R, P	Y, M	Z, U	H, W	J, A
27	28	29	30	31	32	33	34	35	36

Weight of Evidence

Murder Mystery: Clue 2

Was the murderer male or female? Examine the following calculations carefully and tick the questions when you know they are correct. Add up the ticks for each column and write the numbers in the total box. The column with the most right answers indicates the gender of the murderer.

i.e. If the 'female' column has the most right answers then the murderer is female.

Female		Male	
1. $1 \div 1 = 0$	☐	2. $1 \times 1 = 2$	☐
3. $645 + 376 = 1021$	☐	4. $354 + 676 = 1020$	☐
5. $15.5 \times 30 = 465$	☐	6. $15 \times 30 = 455$	☐
7. $0.2 \times 50 = 100$	☐	8. $0.6 \times 5 = 3$	☐
9. $\frac{2}{9}$ of $36 = 12$	☐	10. $\frac{4}{7}$ of $56 = 32$	☐
11. $5 \times 8 \times 9 = 360$	☐	12. $6 \times 7 \times 5 = 410$	☐
13. $534 \div 3 = 175$	☐	14. $436 \div 4 = 109$	☐
15. $23 + 67 = 18 \times 5$	☐	16. $42 + 68 = \frac{1}{2}$ of 200	☐
total correct: ☐		total correct: ☐	

Make sure you double check the answers, you don't want to wrongly accuse someone.
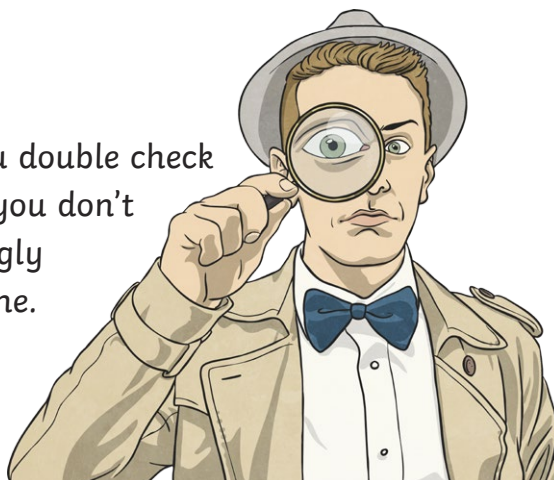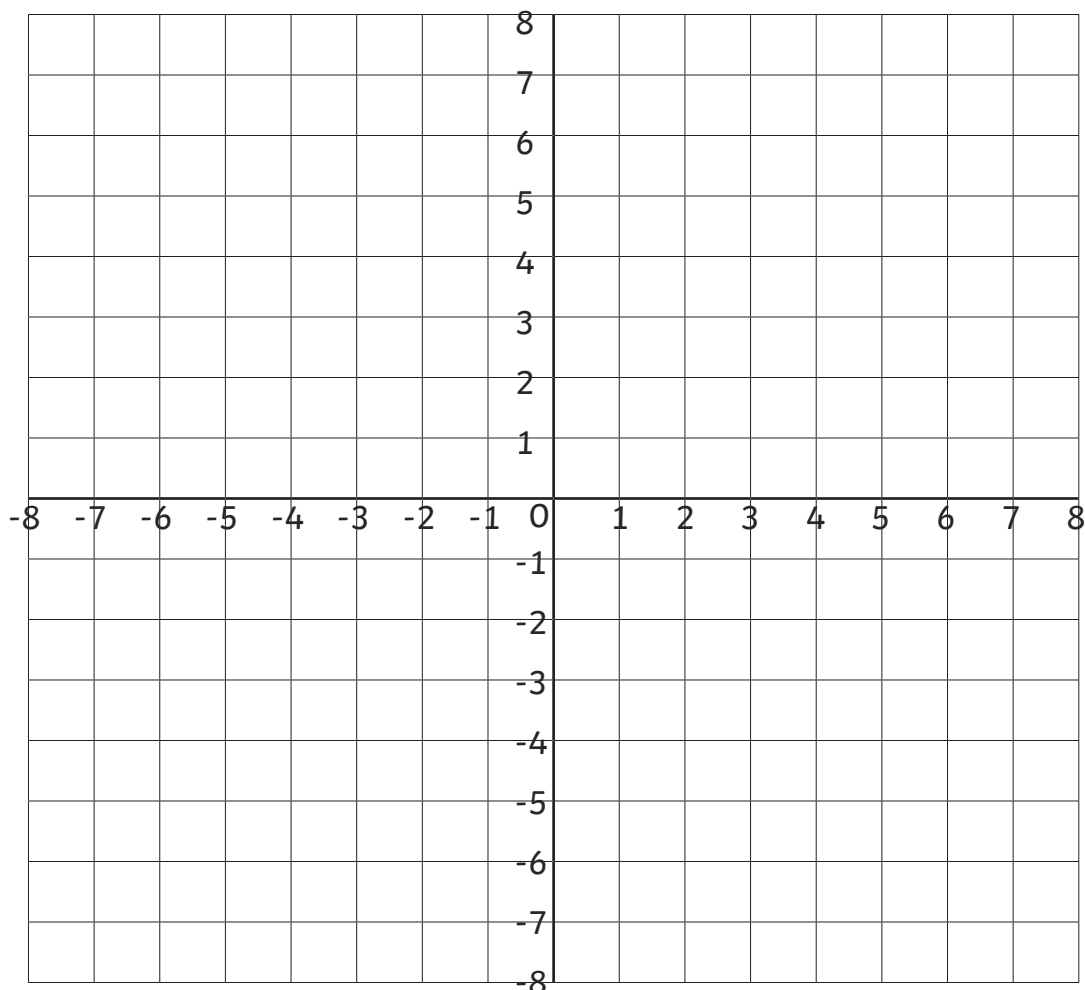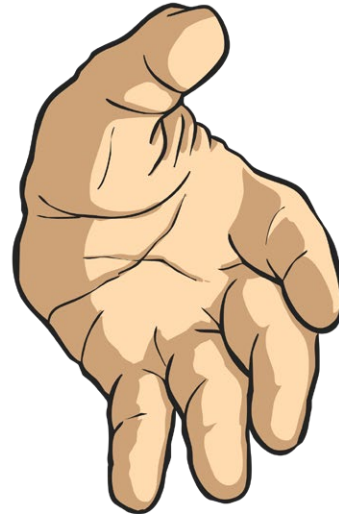
Get It Right, Don't Be Left Confused!

Murder Mystery: Clue 3

Plot these codes as coordinates to discover if the murderer was left or right handed. Join the points together as you go to be sure you are interpreting the clue correctly.

(6,6) (6,0) (6, -6)

(-4, -6) (-3, 0)

(6,0) (-4, 6)

Interpret your answer and eliminate those you can from your inquiry.

Higher or Lower?

Murder Mystery: Clue 4

Follow each sequence of calculations through until you achieve a final number. The two answers will give you an age range that the murderer falls within;

Start	×3	50%	squared	-48	÷11	×12	Answer
6							

Highest possible age:

Start	$\frac{2}{7}$ of	×8	75% of	X6	÷12	+17	Answer
14							

Lowest possible age:

Eliminate any suspects that dont fall within these criteria.

Hair's the Truth

Murder Mystery: Clue 5

A hair which detectives believe to have belonged to the murderer was found near the body. Can you add these Roman numerals together (you may have to turn them into numbers) and then match the answer to the hair colour of the murderer?

CCXXXIII   CMXLIV

DCXXIX   DCCCXXXVII

CDLVIII   DCLXXXI

Brown	MDCCCLXXII
Blonde	MMMDCCLXXXII
Black	MMMDCCCXXVII
Red	MMDCCLXXXII
Grey	MMMDCCLXX

It All Adds Up
Murder Mystery: Clue 6

The final clue which should reveal the murderer's identity is the ticket found which indicates which film the murderer had gone to see. Unfortunately the ticket computer appears to have issued the ticket in a code which you will need to solve.

Each letter of the film name has a numerical value – match the total value of the words in the film to the number on the ticket to see which film the murderer saw. Assume that suspects went to see their favourite type of film and eliminate them on that basis.

Movie: 137
Screen A
Midday
Adult

Movie: 137
Screen A
Midday
Adult
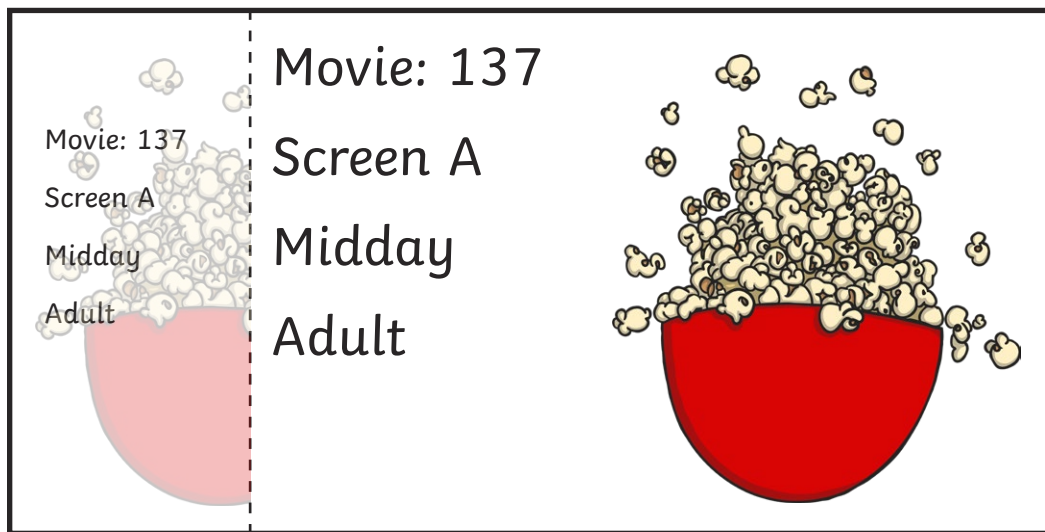
A	B	C	D	E	F	G	H	I	J	K	L	M
1	2	3	4	5	6	7	8	9	10	11	12	13
N	O	P	Q	R	S	T	U	V	W	X	Y	Z
14	15	16	17	18	19	20	21	22	23	24	25	26

Film Name		Total
Saddle Bags at Dawn		
Sum:		
Just You and Me		
Sum:		
Journey to the Stars		
Sum:		

Answers

Zero in on the Murderer: Murder Mystery: Clue 1

1. 10 x 40 = 400
2. 100 x 10 = 1000
3. 3.4 x 10 = 34
4. 0.1 x 10 = 1
5. 345 ÷ 1000 = 0.345
6. 0.05 x 100 = 5
7. 1000 ÷ 1 = 1000
8. 2.8 ÷ 10 = 0.28
9. 236 x 100 = 23 600
10. 32 000 ÷ 100 = 320
11. 3.0002 x 1000 = 3000.2
12. 450 ÷ 45 = 10
13. 100 x 0.86 = 86
14. 100 ÷ 10 = 10
15. 972 ÷ 10 = 97.2
16. 204.9 ÷ 1000 = 0.2049

B, X	F, D	O, S	M, I	V, K	R, P	Y, M	Z, U	H, W	J, A
27	28	29	30	31	32	33	34	35	36

The murderer does not have V or K in their name.

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Weight Murder Mystery: Clue 2

Female

1. 1 ÷ 1 = 0 ✗
3. 645 + 376 = 1021 ✓
5. 15.5 x 30 = 465 ✓
7. 0.2 x 50 = 100 ✗
9. $\frac{2}{9}$ of 36 = 12 ✗
11. 5 x 8 x 9 = 360 ✓
13. 534 ÷ 3 = 175 ✗
15. 23 + 67 = 18 x 5 ✓

total correct: 4

Male

2. 1 x 1 = 2 ✗
4. 354 + 676 = 1020 ✗
6. 15 x 30 = 455 ✗
8. 0.6 x 5 = 3 ✓
10. $\frac{4}{7}$ of 56 = 32 ✓
12. 6 x 7 x 5 = 410 ✗
14. 436 ÷ 4 = 109 ✓
16. 42 + 68 = $\frac{1}{2}$ of 200 ✗
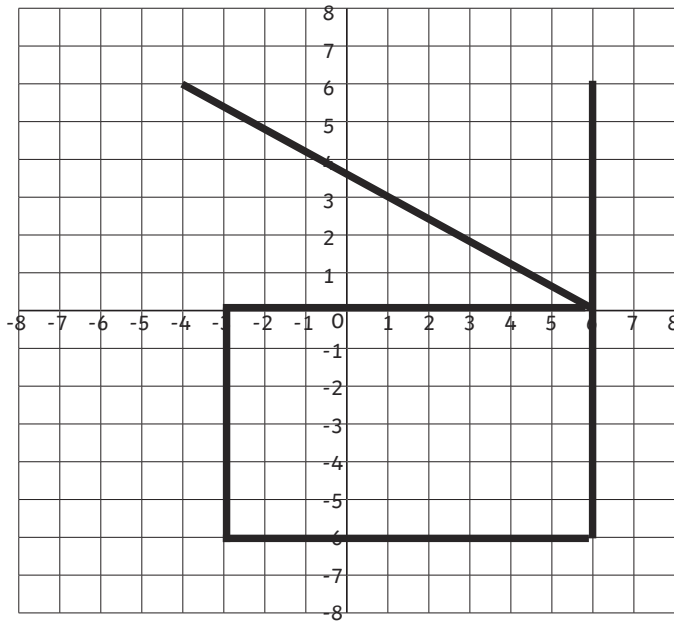
total correct: 3

The murderer is female!

Answers

Get it right, don't be left confused! : Murder Mystery: Clue 3

The murderer is right-handed!

Higher or Lower?: Murder Mystery: Clue 4

Start	×3	50%	squared	-48	÷11	×12	Answer
6	18	9	81	33	3	36	36

Highest possible age: 36

Start	$\frac{2}{7}$ of	×8	75% of	X6	÷12	+17	Answer
14	4	32	24	144	12	29	29

Lowest possible age: 29

Higher or Lower?: Murder Mystery: Clue 5

CCXXXIII	233
DCXXIX	629
CDLVIII	458
CMXLIV	944
DCCCXXXVII	837
+ DCLXXXI	+ 681
MMMDCCLXXXII	3782

Brown	MDCCCLXXII
Blonde	MMMDCCLXXXII
Black	MMMDCCCXXVII
Red	MMDCCLXXXII
Grey	MMMDCCLXX

Answers

It All Adds Up: Murder Mystery: Clue 6

Film Name	Total
Saddle Bags at Dawn	
Sum: 19+1+4+4+12+5+2+1+7+19+1+20+4+1+23+14	137
Just You and Me	
Sum: 10+21+19+20+25+15+21+1+14+4+13+5	168
Journey to the Stars	
Sum: 10+15+21+18+14+5+25+20+15+20+8+5+19+20+1+18+19	253

And the murderer is...

Amalia Clifford!

Hopefully you didn't arrest someone innocent!