

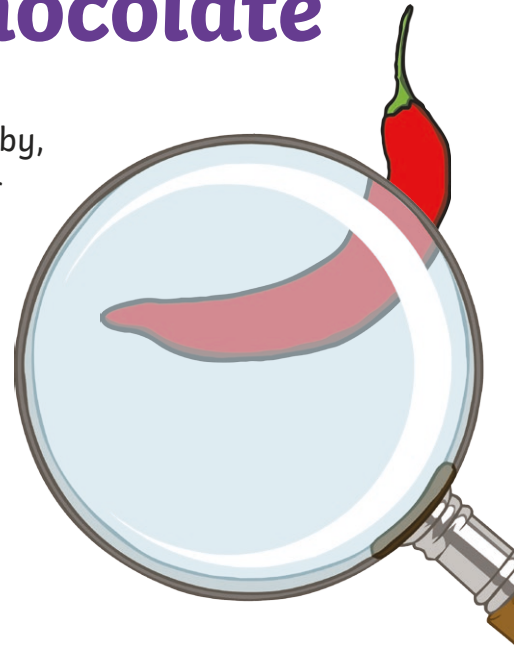
# The Mystery of the Contaminated Chocolate

The UK's leading chocolate manufacturer, Mega-Chocca-Dooby, had just finished testing their final batch of finest Easter eggs to be distributed around the UK when they found their tasters rushing, red in the face, for glasses of cold milk!

On closer inspection, the whole batch had been sabotaged when it was found that someone had poured chilli oil into the chocolate vats!

When the CCTV footage was viewed, all that could be seen was a hooded figure pouring in the oil in the dead of night.

So who was the perpetrator?



You are the Detective Inspector in charge of the investigation...

Solve the following clues to eliminate all-but-one of the following suspects based on their gender, height, eye colour, hair colour and the transport they use.

Good Luck... Mega-Chocca-Dooby is depending on you!

## The Mystery of the Contaminated Chocolate

Name	M/F	Height	Eye Colour	Hair Colour	Transport Used
Arthur Almond	M	1.72m	Blue	ginger	walk
Anneke Anise	F	1.83m	Brown	blonde	car
Brenda Buttercream	F	152cm	Green	black	motorbike
Brian Bonbon	M	190cm	Brown	bald	bus
Celia Carob	F	1.8m	Brown	ginger	bicycle
Clive Confection	M	1850mm	Brown	brown	car
Danny Drizzle	M	1.85m	Grey	blond	bicycle
Danuta Doublechoc	F	1.7m	Hazel	blonde	car
Elsie Eatery	F	158cm	Blue	grey	walk
Elias Eccles	M	1.64m	Green	brown	bicycle
Fiona Fudge	F	1.6m	Blue	ginger	bicycle
Freddie Fondue	M	1.81m	Blue	bald	motorbike
Gordon Ganache	M	191cm	Hazel	brown	car
Gemma Glucose	F	176cm	Brown	blonde	bicycle
Harold Honey	M	1.89m	Brown	grey	bicycle
Heidi Hazelnut	F	1.77m	Green	black	car
Iris Icing	F	164cm	Blue	ginger	walk
Ian Icecream	M	1.84m	Hazel	brown	walk
Joe Jammy	M	1.8m	Green	ginger	motorbike
Janine Jelly	F	159cm	Blue	brown	bicycle
Katie Kremery	F	1.69m	Grey	blonde	car
Kevin Kiwi	M	1.62m	Brown	brown	bus
Leonard Lemony	M	1780mm	Blue	bald	car
Leanne Lime	F	1.59m	Green	brown	walk
Mike Mocha	M	172cm	Hazel	black	bicycle
Millie Muffin	F	1.66m	Blue	ginger	motorbike
Noah Nougat	M	1840mm	Brown	ginger	motorbike
Nuala Nutmeg	F	163cm	Hazel	brown	walk
Olivia Ombre	F	1.6m	Brown	blonde	bicycle
Otis Orange	M	1700mm	Blue	blond	car
Paula Pavlova	F	166cm	Green	grey	motorbike
Patrick Praline	M	1.65m	Brown	bald	walk

## Clue 1

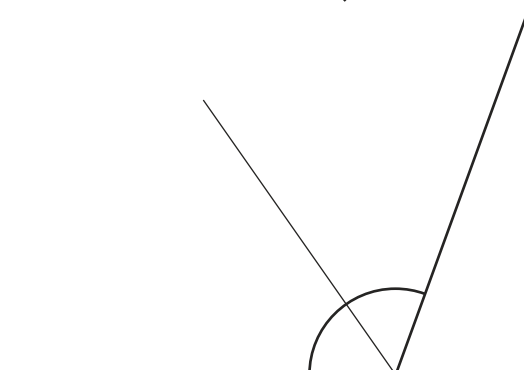
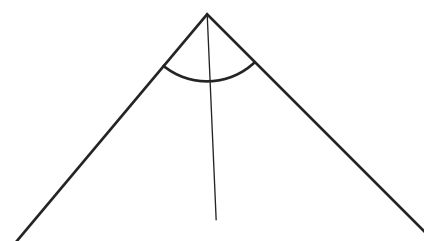
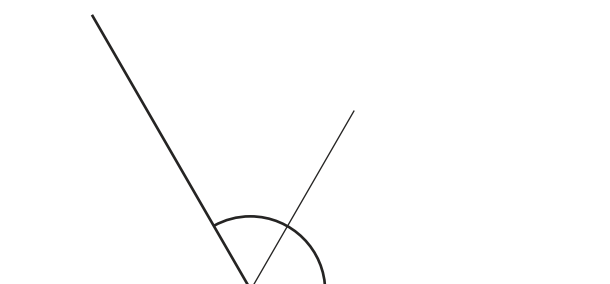
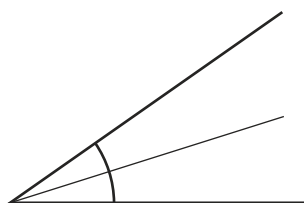
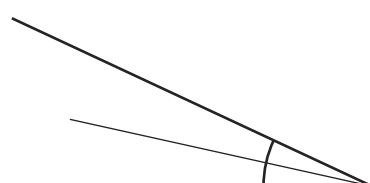
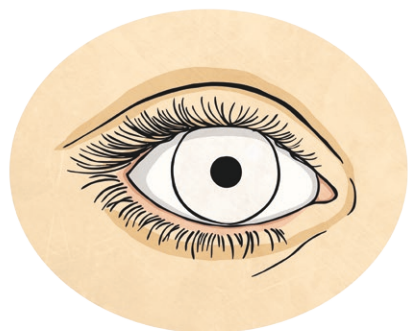
Your detectives have worked out that to reach the chocolate vats you need to be over a certain height. That height in millimetres will be the number that is the odd one out from these calculation answers. Unfortunately, some wise guy has put them into Roman Numerals so you'll have to translate them first...



a)	C	C	L	I	I	I	x	I	V			
b)	M	C	M	X	C	V	-	C	C	X	L	V
c)	M	M	M	X	X	X	V	I	÷	I	I	I

## Clue 2

One of the CCTV cameras near the entrance of the factory was covered over by the hooded criminal, but unfortunately for them, the camera caught a glimpse of the colour of their eyes. Measure these angles, use the code cracker, pick one letter from each angle and rearrange the letters to find out the eye colour of our chocolate hooligan.



Angle	Letters to choose from
120°	R or E
85°	A or O
25°	B or H or U
15°	G or Z
35°	L or W
110°	N or Y

## Clue 3

Outside the factory, your scene of crime officers (SOCOs) found something in the mud that tells them what you will need to work out from the fraction code below. The evidence is written in improper fractions and to solve it you need to find the letter with the matching whole or mixed number and write it down.

A	B	C	D	E	H	I	K
10	$2\frac{1}{4}$	$3\frac{1}{6}$	5	$2\frac{1}{3}$	$3\frac{1}{5}$	$3\frac{3}{4}$	$3\frac{1}{11}$
L	O	P	R	S	T	U	W
$5\frac{2}{5}$	$3\frac{3}{5}$	3	$1\frac{1}{4}$	$3\frac{1}{3}$	$2\frac{2}{3}$	$1\frac{1}{2}$	$2\frac{3}{4}$

$\frac{40}{15}$	$\frac{32}{10}$	$\frac{28}{12}$	$\frac{19}{6}$	$\frac{21}{14}$

$\frac{27}{5}$	$\frac{12}{4}$	$\frac{10}{8}$	$\frac{45}{12}$	$\frac{40}{15}$

$\frac{10}{8}$	$\frac{45}{12}$	$\frac{35}{7}$	$\frac{28}{12}$	$\frac{30}{9}$

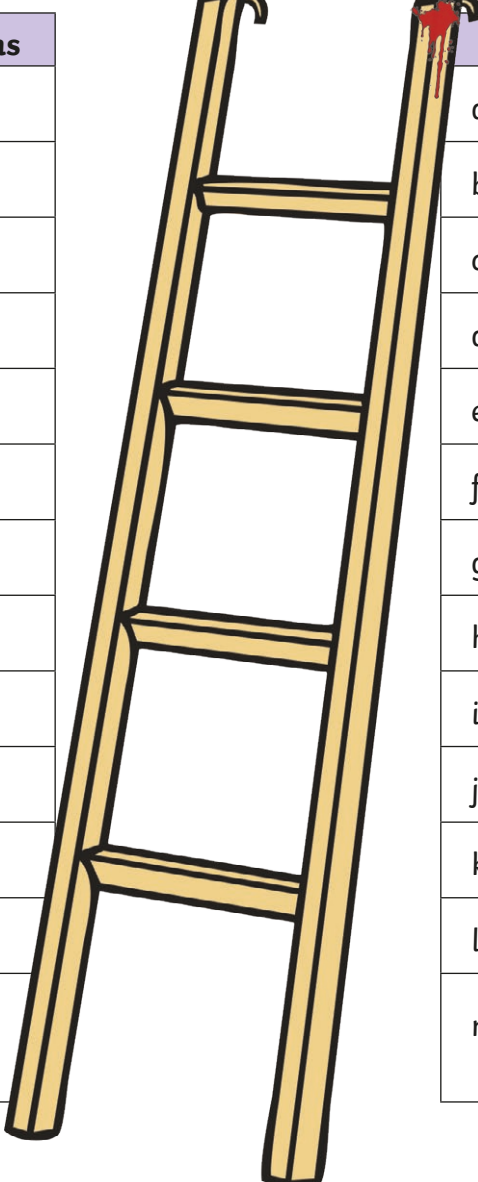
$\frac{100}{10}$	$\frac{54}{24}$	$\frac{45}{12}$	$\frac{34}{11}$	$\frac{28}{12}$



## Clue 4

The SOCOs have done some more investigating and have found some blood where the wrongdoer cut themselves on the ladder to the chocolate vat. From that sample, they were able to determine something about the person. You can find their answer by solving the algebraic equations to find out the value of each letter below. Then you will be able to solve the clue.

Algebraic Expressions	Answers
$a + 7 = 10$	$a =$
$14 - b = 3 + 7$	$b =$
$a + b = c$	$c =$
$d + a = 8$	$d =$
$e - b = -2$	$e =$
$f^2 = 36$	$f =$
$6g = 6$	$g =$
$\sqrt{121} = h$	$h =$
$i = a^2$	$i =$
$ab = j$	$j =$
$k = e^3$	$k =$
$l = 2f + g$	$l =$
$\frac{j + k}{2} = m$	$m =$

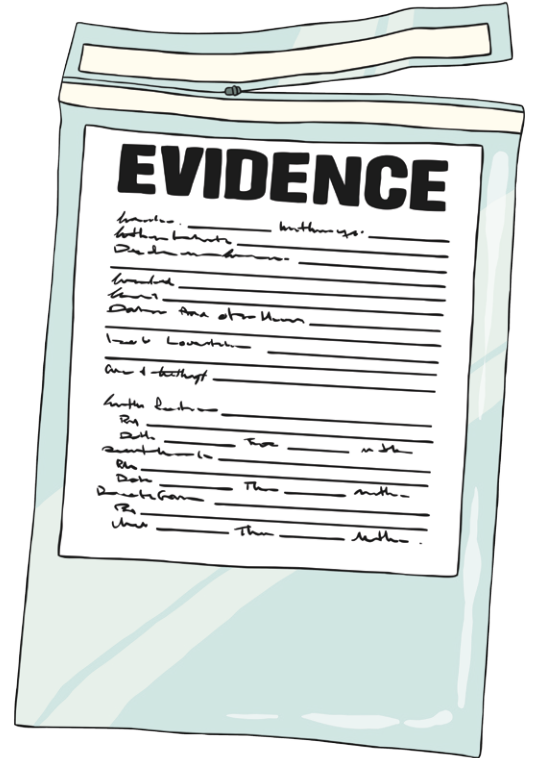


**Clue: 6, 2, 10, 3, 13, 2**

## Clue 5

The SOCOs have found one more piece of evidence that will finally tell us the identity of the offender. Use this jumbled up times tables square to crack the code below to discover their findings.

x	2	5	7	3	10	8	6	4	1	9
6	I	A	L	V	B	K	D	C	J	"
9	V	M	!	T	\$	Y	"	D	H	B
3	J	S	U	H	A	C	V	I	:	T
1	Q	&	.	:	P	W	J	X	Z	H
7	F	G	@	U	/	O	L	)	.	!
2	X	P	F	J	R	N	I	W	Q	V
8	N	?	O	C	#	E	K	£	W	Y
5	P	(	G	S	*	?	A	R	&	M
10	R	*	/	A	%	#	B	?	P	\$
4	W	R	)	I	?	£	C	N	X	D



30	42	56	16	35

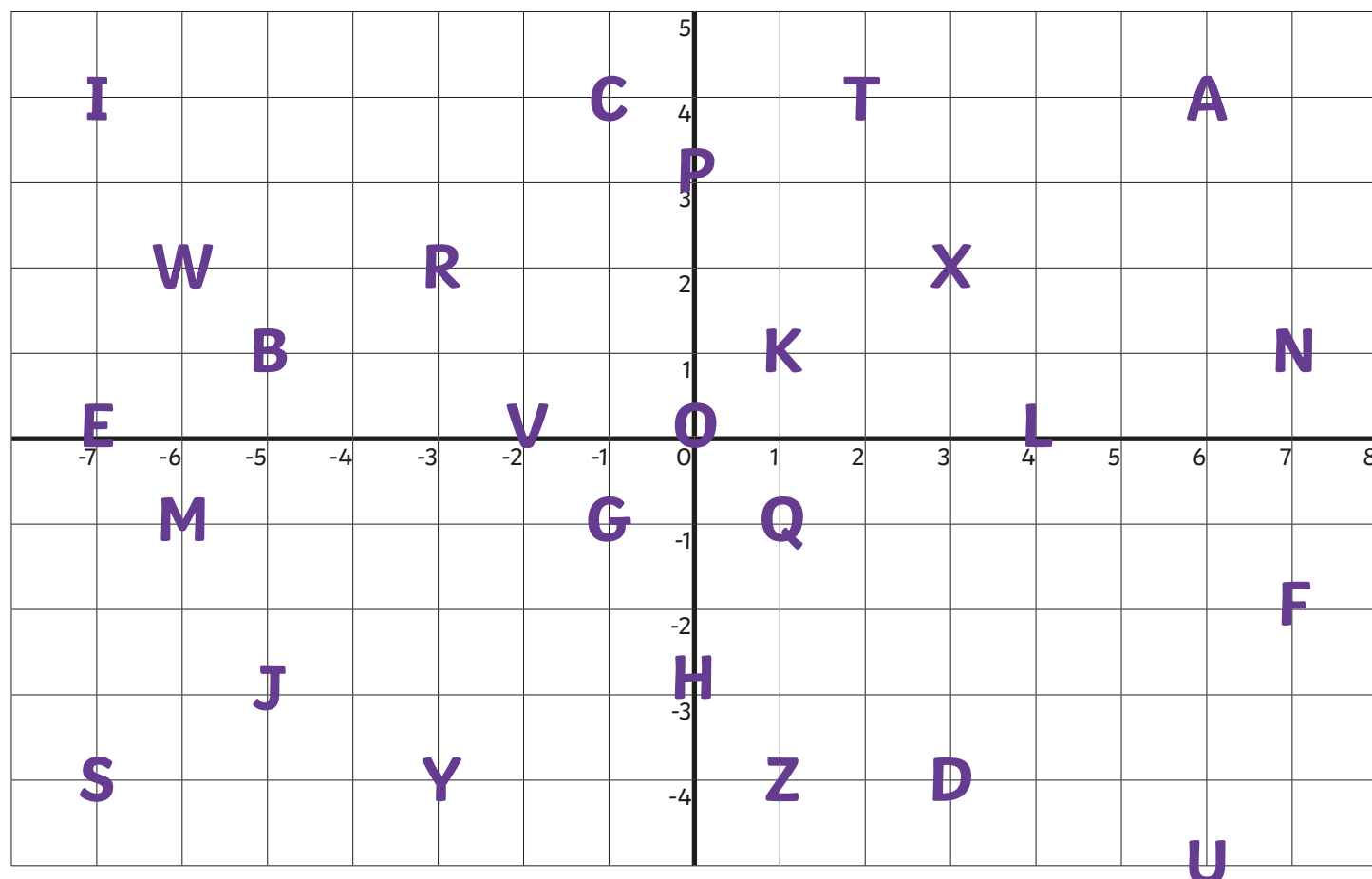
81	42	56	16	36	64

9	30	12	20	63

The Culprit: \_\_\_\_\_

# The Confession

When the trespasser was eventually caught and brought to face charges, they were asked about their motive. Solve the code below to find out what they said.



<b>(-7,4)</b>	<b>(-6,2)</b>	<b>(6,4)</b>	<b>(7,1)</b>	<b>(2,4)</b>	<b>(-7,0)</b>

<b>(3,-4)</b>	<b>(2,4)</b>	<b>(0,0)</b>	<b>(-6,-1)</b>	<b>(6,4)</b>	<b>(1,1)</b>

<b>(-7,0)</b>	<b>(0,-3)</b>	<b>(0,0)</b>	<b>(2,4)</b>	<b>(-1,4)</b>	<b>(0,-3)</b>

<b>(0,0)</b>	<b>(-1,4)</b>	<b>(0,0)</b>	<b>(4,0)</b>	<b>(6,4)</b>	<b>(2,4)</b>	<b>(-7,0)</b>



# Answers

**Clue 1:**

1.75m or 175cm

**Clue 2:**

BROWN

**Clue 3:**

The culprit rides a bike.

**Clue 4:**

FEMALE

**Clue 5:**

A long blonde hair!

**The Culprit:**

Gemma Glucose

**The Confession:**

I wanted to make hot chocolate.