
3 FREE DETECTIVE MYSTERIES

The Detective's Logic Casebook

Bonus case files

Three new, original mini-mysteries: a beginner case, an intermediate case and an advanced case. Printable worksheets, three layers of hints and full step-by-step solutions are inside.

Solve them with a pencil. Everything you need is on the page.

MindGrid Books

The paperback is coming soon: mindgridbooks.com/detective-logic-casebook

Welcome, Detective

These three cases are a free bonus from MindGrid Books. They are new: none of them appears in *The Detective's Logic Casebook*, the paperback of 40 original detective logic mysteries that is coming soon.

Each case is a logic puzzle that you solve with a pencil. The story, the suspects, the evidence and a grid to work in are all printed on the case's pages. You never need outside knowledge, and you never need to guess: every case can be solved by deduction alone.

The cases get harder as you go. Case 1 is a beginner case with three suspects. Case 2 is intermediate, with four suspects and a chain of several steps. Case 3 is advanced and asks you to weigh statements as well as facts.

At the back are blank worksheets you can print again and again, then three layers of hints, then the full solutions. Try each case before you open the hints, and write your answer on the answer sheet before you read a solution.

How to Solve a Case

1. Read the story and meet the suspects. The question at the end of the story is the one you have to answer.
2. Learn the house rules. Every suspect was in exactly one place, carried exactly one item and arrived at exactly one time, and no two suspects share a place, an item or a time. Exactly one suspect is the culprit.
3. Work through the evidence one clue at a time. In the grid, put an X where something cannot be true and a dot where it must be. A new fact usually lets you cross out more squares.
4. Some clues are statements. A case that has them prints a rule on its page that says whose statements can be trusted: follow that rule exactly.
5. When the grid is full, check that every clue is true and that the culprit is the only suspect left. Then write your answer on the answer sheet.
6. Stuck? Open the first hint only. If it is not enough, try the second, then the third. The solutions are last: they explain every step.

Light Out on the Headland

The Gull Rock Lighthouse, a working lighthouse on a rocky headland, open to visitors during the summer season.

Gull Rock Lighthouse has guided ships past the headland for more than a century, and every visitor climbs its stairs to see the lamp. When the visitors had gone down the stairs, the lamp room was found empty of its famous brass signal lamp. Inspector Wren Bellcroft has three suspects, six pieces of evidence, and one question: who took the brass signal lamp?

YOUR TASK

Find out who took the brass signal lamp. For every suspect, work out which room they were in and what they carried.

SUSPECTS

Leif Quennell	Zara Vosburgh	Bram Holloway
Leif Quennell is a local historian. He corrects every date he hears. Writing hand: left	Zara Vosburgh is the gift-stall owner. She gives a tiny bow to every customer. Writing hand: right	Bram Holloway is a retired ship's cook. He hums sea songs while he works. Writing hand: left

EVIDENCE

Tick each piece of evidence as you use it.

1	Whoever was in the Boat Shed carried a tin of biscuits.	☐
2	According to the harbor master Bram Holloway did not carry a tin of biscuits.	☐
3	The ferry pilot is certain The person who carried a ball of twine is not the person who was in the Cliff Cottage.	☐
4	According to the ferry pilot Leif Quennell is not the thief.	☐
5	According to a visiting child The thief was not in the Visitor Hall.	☐
6	The lamp engineer's inspection reports Whoever carried a ball of twine is right-handed.	☐

LOGIC GRID

Put an X where it cannot be and a dot where it must be.

		ROOM			ITEM CARRIED		
		Boat Shed	Visitor Hall	Cliff Cottage	ball of twine	tin of biscuits	flask of tea
SUSPECT	Leif Quennell						
	Zara Vosburgh						
	Bram Holloway						
ITEM CARRIED	ball of twine						
	tin of biscuits						
	flask of tea						

DETECTIVE'S NOTES

A Pumpkin Gone Missing

The Thistledown Harvest Market, an open-air autumn market on the old village green, with a prize for the finest vegetable of the year.

The autumn market is the one day of the year when the whole village crowds onto the green. Shortly after the judging, the blue-ribbon pumpkin was found to be missing from its plinth. Inspector Wren Bellcroft has four suspects, eight pieces of evidence, and one question: who took the champion's blue-ribbon pumpkin?

YOUR TASK

Find out who took the champion's blue-ribbon pumpkin. For every suspect, work out which place they were in, what they carried and when they arrived.

EVIDENCE _____ Tick each piece of evidence as you use it.

- 1

The judging sheet confirms
Whoever carried a wicker basket arrived exactly 15 minutes after Hester Pennywhistle.

☐
- 2

The stallholders' register shows
Hildegard Moss arrived exactly 15 minutes before whoever carried a pocket scale.

☐
- 3

The stallholders' register shows
Whoever was in the Cheese Tent arrived exactly 15 minutes before whoever carried a wicker basket.

☐
- 4

The person who was in the Cider Barn also carried a pocket scale.

☐
- 5

Noted at the scene
The person who arrived at 10:30 AM also carried a bunch of sunflowers.

☐
- 6

The stallholders' register shows
The thief arrived exactly 15 minutes after Evander Wrenfield.

☐
- 7

The constable's examination reports
Whoever carried a wicker basket is left-handed.

☐
- 8

The judging sheet confirms
Whoever carried a wicker basket arrived after whoever was in the Flower Pavilion.

☐

DETECTIVE'S NOTES _____

SUSPECTS

Evander Wrenfield Writing hand: right	Evander Wrenfield is a cider brewer. He laughs at his own jokes before he finishes them.
Hester Pennywhistle Writing hand: left	Hester Pennywhistle is the market's chief judge. She tastes everything with great ceremony.
Hortensia Ashcombe Writing hand: left	Hortensia Ashcombe is the bandmaster. He conducts even when no one is playing.
Hildegard Moss Writing hand: right	Hildegard Moss is the village florist. She rearranges other people's bouquets without asking.

LOGIC GRID Put an X where it cannot be and a dot where it must be.

		PLACE	ITEM CARRIED				ARRIVAL TIME			
		Flower Pavilion	Cider Barn	Cheese Tent	Judging Tent	cash tin	bunch of sunflowers	pocket scale	wicker basket	
SUSPECT	Evander Wrenfield									
	Hester Pennywhistle									
	Hortensia Ashcombe									
	Hildegard Moss									
ARRIVAL TIME	10:00 AM									
	10:15 AM									
	10:30 AM									
	10:45 AM									
ITEM CARRIED	cash tin									
	bunch of sunflowers									
	pocket scale									
	wicker basket									

TIMELINE Write each suspect under the time that fits.

10:00 AM	10:15 AM	10:30 AM	10:45 AM

Arrival time

A Silent Film Mystery

The Orchard Street Picture House, a family-run cinema from the 1930s, preparing its anniversary screening of a silent film.

Posters for the anniversary screening had been up in the foyer for a month before the big evening. The rare reel, delivered that afternoon in a sealed case, had vanished before the doors opened. Inspector Wren Bellcroft has four suspects, eight pieces of evidence, and one question: who took the rare anniversary film reel?

YOUR TASK

Find out who took the rare anniversary film reel. For every suspect, work out which room they were in, what they carried and when they arrived.

TESTIMONY RULE

Innocent suspects always tell the truth. The culprit's statements are false.

EVIDENCE

Tick each piece of evidence as you use it.

- 1

Matilda Orsini told the inspector
“The person who arrived at 6:15 PM is not the person who was in the Ticket Foyer.”

☐
- 2

It was the thief who was in the Organ Loft.

☐
- 3

The delivery receipt confirms
Whoever carried a flashlight arrived before whoever was in the Organ Loft.

☐
- 4

The delivery receipt confirms
Whoever carried a clipboard arrived exactly 15 minutes after whoever was in the Manager's Office.

☐
- 5

The delivery receipt confirms
Whoever carried a flashlight arrived exactly 15 minutes before Quentin Tillerman.

☐
- 6

Bronwyn Orme says
“Whoever was in the Projection Booth is tall.”

☐
- 7

Noted at the scene
It was Octavian Hale who carried a clipboard.

☐
- 8

The person who carried a spare bulb also arrived at 6:00 PM.

☐

SUSPECTS

Octavian Hale Writing hand: right · Height: short	Octavian Hale is the cinema manager. He straightens every frame he passes.
Matilda Orsini Writing hand: right · Height: short	Matilda Orsini is a silent-film pianist. She taps rhythms on every tabletop she passes.
Quentin Tillerman Writing hand: left · Height: tall	Quentin Tillerman is the wardrobe mistress. She carries pins in her cuff at all times.
Bronwyn Orme Writing hand: left · Height: tall	Bronwyn Orme is a film archive courier. He wears white cotton gloves from habit.

LOGIC GRID Put an X where it cannot be and a dot where it must be.

		ROOM	ITEM CARRIED				ARRIVAL TIME			
		Organ Loft	Manager's Office	Ticket Foyer	Projection Booth	flashlight	roll of tickets	clipboard	spare bulb	
SUSPECT	Octavian Hale									
	Matilda Orsini									
	Quentin Tillerman									
	Bronwyn Orme									
ARRIVAL TIME	6:00 PM									
	6:15 PM									
	6:30 PM									
	6:45 PM									
ITEM CARRIED	flashlight									
	roll of tickets									
	clipboard									
	spare bulb									

TIMELINE Write each suspect under the time that fits.

6:00 PM

6:15 PM

6:30 PM

6:45 PM

Arrival time

DETECTIVE'S NOTES

SUSPECT-BY-EVIDENCE GRID

Write a suspect in each row and a clue or fact above each column. Mark X for impossible and a dot for certain.

Case: _____ Name: _____

Suspect								

MULTI-CATEGORY LOGIC GRID

Name your categories, for example A = Suspect, B = Room, C = Item, and write five values beside and above the blocks.

Case: _____ Name: _____

Category B across the top

Category C across the top

Category A down the left

Tip: a dot in one square means every other square in its row and column of that block is an X.

Category C down the left of this block

CLUE TRACKER

One row per clue. Tick Used when the clue has done its work.

Case: _____ Name: _____

Clue	What it tells me	New fact?	Used
1			
2			
3			
4			
5			
6			
7			
8			
9			
10			
11			
12			
13			
14			
15			

SUSPECT ELIMINATION CARDS

One card per suspect. Write what you know, then cross out the card when the evidence clears that suspect.

Case: _____ Name: _____

Suspect: _____

Place: _____

Item: _____

Time: _____

Motive or statement: _____

☐ cleared ☐ possible ☐ culprit

Suspect: _____

Place: _____

Item: _____

Time: _____

Motive or statement: _____

☐ cleared ☐ possible ☐ culprit

Suspect: _____

Place: _____

Item: _____

Time: _____

Motive or statement: _____

☐ cleared ☐ possible ☐ culprit

Suspect: _____

Place: _____

Item: _____

Time: _____

Motive or statement: _____

☐ cleared ☐ possible ☐ culprit

Suspect: _____

Place: _____

Item: _____

Time: _____

Motive or statement: _____

☐ cleared ☐ possible ☐ culprit

Suspect: _____

Place: _____

Item: _____

Time: _____

Motive or statement: _____

☐ cleared ☐ possible ☐ culprit

Case: _____ Name: _____

A horizontal timeline consisting of a solid line with 6 equal segments. Each segment is separated by a vertical dashed line, creating 6 empty rectangular boxes for text.

[illegible]

ANSWER SHEET

Write your answers here before you open the solutions.

Case: _____ Name: _____

CASE 01 Light Out on the Headland

Who did it? _____

Where was the culprit? _____

What did the culprit carry? _____

Everything else I worked out: _____

Hints used: ☐ 1 ☐ 2 ☐ 3 Solved: ☐ yes ☐ with help

CASE 02 A Pumpkin Gone Missing

Who did it? _____

Where was the culprit? _____

What did the culprit carry? _____

Everything else I worked out: _____

Hints used: ☐ 1 ☐ 2 ☐ 3 Solved: ☐ yes ☐ with help

CASE 03 A Silent Film Mystery

Who did it? _____

Where was the culprit? _____

What did the culprit carry? _____

Everything else I worked out: _____

Hints used: ☐ 1 ☐ 2 ☐ 3 Solved: ☐ yes ☐ with help

DETECTIVE'S NOTES

Hints

Each case has three hints, on separate pages so that reading one never shows you the next. Take them one at a time.

First hints: where to start

CASE 01

Light Out on the Headland

Start with clues 1, 2, 3, 4 and 6.

Next hint: page 19.

CASE 02

A Pumpkin Gone Missing

Start with clues 1, 4, 5 and 7.

Next hint: page 19.

CASE 03

A Silent Film Mystery

Start with clues 7 and 8.

Next hint: page 19.

DETECTIVE'S NOTES

Second hints: a fact you can reach**CASE 01**

Light Out on the Headland

Zara Vosburgh carried a ball of twine.

Next hint: page 21.

CASE 02

A Pumpkin Gone Missing

Evander Wrenfield carried a pocket scale.

Next hint: page 21.

CASE 03

A Silent Film Mystery

Quentin Tillerman carried a roll of tickets.

Next hint: page 21.

DETECTIVE'S NOTES

Third hints: the clues that decide the case**CASE 01**

Light Out on the Headland

The decisive step uses clue 5: after it, only one suspect can be the thief.

Solution: page 23.

CASE 02

A Pumpkin Gone Missing

The decisive step uses clue 6: after it, only one suspect can be the thief.

Solution: page 23.

CASE 03

A Silent Film Mystery

The decisive step uses clue 2: after it, only one suspect can be the thief.

Solution: page 25.

DETECTIVE'S NOTES

Solutions

Every step below follows the deduction the book's checker verified, in order. Sub-steps (1a, 1b, ...) take one clue at a time.

CASE 01 Light Out on the Headland

- Step 1a** By clue 1, the person who was in the Boat Shed did not carry a ball of twine or a flask of tea.
- Step 1b** By clue 2, Bram Holloway did not carry a tin of biscuits.
- Step 1c** By clue 1 again, Bram Holloway was not in the Boat Shed.
- Step 1d** By clue 3, the person who carried a ball of twine was not in the Cliff Cottage.
- Step 1e** By clue 4, Leif Quennell is not the thief.
- Step 1f** By clue 6, Leif Quennell and Bram Holloway did not carry a ball of twine.
- Step 1g** Putting these together. Therefore, Bram Holloway carried a flask of tea.
- Step 2** By clue 3, Zara Vosburgh was not in the Cliff Cottage. No two suspects share the same item carried or room, so an option that is left alone in a row or column of the grid must be the answer. Therefore, Zara Vosburgh carried a ball of twine.
- Step 3** By clue 1, Zara Vosburgh was not in the Boat Shed. Crossing off the grid does the rest (item carried or room). Therefore, Zara Vosburgh was in the Visitor Hall; Leif Quennell carried a tin of biscuits and was in the Boat Shed; Bram Holloway was in the Cliff Cottage.
- Step 4** By clue 5, Zara Vosburgh is not the thief. Therefore, Bram Holloway is the thief.

THE ANSWER	Bram Holloway took the brass signal lamp. Bram Holloway was in the Cliff Cottage and carried a flask of tea. Leif Quennell was in the Boat Shed and carried a tin of biscuits. Zara Vosburgh was in the Visitor Hall and carried a ball of twine.
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CASE 02 A Pumpkin Gone Missing

- Step 1a** By clue 4, the person who was in the Cider Barn did not carry a cash tin, a bunch of sunflowers or a wicker basket.
- Step 1b** By clue 5, the person who arrived at 10:30 AM did not carry a cash tin, a pocket scale or a wicker basket.
- Step 1c** By clue 7, Evander Wrenfield and Hildegard Moss did not carry a wicker basket.

- Step 1d** By clue 1, Hester Pennywhistle did not carry a wicker basket and did not arrive at 10:15 AM or 10:45 AM; the person who carried a wicker basket did not arrive at 10:00 AM.
- Step 1e** Putting these together. No two suspects share the same arrival time, item carried or place, so an option that is left alone in a row or column of the grid must be the answer. Therefore, Hortensia Ashcombe carried a wicker basket.
- Step 2a** By clue 4, Hortensia Ashcombe was not in the Cider Barn.
- Step 2b** By clue 5, Hortensia Ashcombe did not arrive at 10:30 AM.
- Step 2c** By clue 2, Hester Pennywhistle did not carry a pocket scale; Hildegard Moss did not carry a pocket scale and did not arrive at 10:15 AM or 10:45 AM; the person who carried a pocket scale did not arrive at 10:00 AM.
- Step 2d** By clue 4 again, Hester Pennywhistle and Hildegard Moss were not in the Cider Barn.
- Step 2e** Putting these together. Crossing off the grid does the rest (item carried). Therefore, Evander Wrenfield carried a pocket scale.
- Step 3** By clue 5, Evander Wrenfield did not arrive at 10:30 AM. Crossing off the grid does the rest (arrival time, item carried or place). Therefore, Evander Wrenfield was in the Cider Barn.
- Step 4** By clue 3, Hortensia Ashcombe was not in the Cheese Tent; the person who was in the Cheese Tent did not arrive at 10:15 AM or 10:45 AM. By clue 6, Evander Wrenfield did not arrive at 10:45 AM and is not the thief; the thief did not arrive at 10:00 AM or 10:45 AM. Crossing off the grid does the rest (arrival time). Therefore, Hortensia Ashcombe arrived at 10:45 AM; Evander Wrenfield arrived at 10:15 AM.
- Step 5** By clue 1, Hortensia Ashcombe did not arrive at 10:15 AM; Hester Pennywhistle did not arrive at 10:00 AM. Crossing off the grid does the rest (arrival time or item carried). Therefore, Hester Pennywhistle arrived at 10:30 AM; Hildegard Moss arrived at 10:00 AM.
- Step 6** By clue 5, Hildegard Moss did not carry a bunch of sunflowers. Crossing off the grid does the rest (item carried). Therefore, Hildegard Moss carried a cash tin; Hester Pennywhistle carried a bunch of sunflowers.
- Step 7** By clue 3, Hildegard Moss was not in the Cheese Tent. Crossing off the grid does the rest (arrival time or place). Therefore, Hester Pennywhistle was in the Cheese Tent.
- Step 8** By clue 6, Hortensia Ashcombe and Hildegard Moss are not the thief; the thief did not arrive at 10:15 AM. Therefore, Hester Pennywhistle is the thief.

Step 9 By clue 8, Hortensia Ashcombe and Evander Wrenfield were not in the Flower Pavilion. Crossing off the grid does the rest (item carried or place). Therefore, Hortensia Ashcombe was in the Judging Tent; Hildegard Moss was in the Flower Pavilion.

THE ANSWER	Hester Pennywhistle took the champion's blue-ribbon pumpkin. Evander Wrenfield was in the Cider Barn, carried a pocket scale and arrived at 10:15 AM. Hester Pennywhistle was in the Cheese Tent, carried a bunch of sunflowers and arrived at 10:30 AM. Hildegard Moss was in the Flower Pavilion, carried a cash tin and arrived at 10:00 AM. Hortensia Ashcombe was in the Judging Tent, carried a wicker basket and arrived at 10:45 AM.
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CASE 03 A Silent Film Mystery

- Step 1** By clue 7, Matilda Orsini, Quentin Tillerman and Bronwyn Orme did not carry a clipboard. By clue 8, the person who carried a spare bulb did not arrive at 6:15 PM, 6:30 PM or 6:45 PM. No two suspects share the same item carried, so an option that is left alone in a row or column of the grid must be the answer. Therefore, Octavian Hale carried a clipboard.
- Step 2a** By clue 8, Octavian Hale did not arrive at 6:00 PM.
- Step 2b** Crossing off the grid, the person who carried a flashlight did not arrive at 6:00 PM; the person who carried a roll of tickets did not arrive at 6:00 PM; Octavian Hale did not arrive at 6:00 PM. By clue 3, the person who carried a flashlight did not arrive at 6:45 PM and was not in the Organ Loft; the person who was in the Organ Loft did not arrive at 6:00 PM or 6:15 PM.
- Step 2c** By clue 4, Octavian Hale was not in the Manager's Office; the person who was in the Manager's Office did not arrive at 6:45 PM.
- Step 2d** By clue 5, Quentin Tillerman did not carry a flashlight and did not arrive at 6:00 PM or 6:15 PM.
- Step 2e** By clue 8 again, Quentin Tillerman did not carry a spare bulb.
- Step 2f** Putting these together. Crossing off the grid does the rest (item carried). Matching the grids: whatever is known about an arrival time, an item carried or a room also applies to the suspect who has it. The person who was in the Organ Loft still has two possible items: a roll of tickets or a clipboard. From the grid so far, Matilda Orsini and Bronwyn Orme did not carry a roll of tickets or a clipboard. So Matilda Orsini and Bronwyn Orme were not in the Organ Loft. Therefore, Quentin Tillerman carried a roll of tickets.
- Step 3a** By clue 2, Matilda Orsini and Bronwyn Orme are not the thief.
- Step 3b** By clue 1, the person who arrived at 6:15 PM was not in the Ticket Foyer.
- Step 3c** By clue 6, Octavian Hale and Matilda Orsini were not in the Projection Booth.

- Step 3d** Matilda Orsini and Bronwyn Orme still have two possible items: a flashlight or a spare bulb. From the grid so far, whoever carried either of them did not arrive at 6:45 PM. So Matilda Orsini and Bronwyn Orme did not arrive at 6:45 PM. Matching the grids, Octavian Hale was not in the Projection Booth. Octavian Hale still has two possible rooms: the Organ Loft or the Ticket Foyer. From the grid so far, whoever was in either of them did not arrive at 6:15 PM. So Octavian Hale did not arrive at 6:15 PM. By clue 4, the person who was in the Manager's Office did not arrive at 6:00 PM.
- Step 3e** Crossing off the grid, the person who arrived at 6:30 PM did not carry a flashlight. By clue 5, Quentin Tillerman did not arrive at 6:45 PM.
- Step 3f** Putting these together. Crossing off the grid does the rest (arrival time). Only a suspect who fits everything known about the thief can be the thief. Therefore, Quentin Tillerman arrived at 6:30 PM; Octavian Hale arrived at 6:45 PM.
- Step 4** By clue 4, Matilda Orsini and Bronwyn Orme were not in the Manager's Office; Octavian Hale did not arrive at 6:30 PM; the person who was in the Manager's Office did not arrive at 6:15 PM. Crossing off the grid does the rest (arrival time, item carried or room). Therefore, Matilda Orsini was in the Ticket Foyer; Quentin Tillerman was in the Manager's Office.
- Step 5** By clue 2, Quentin Tillerman is not the thief. Crossing off the grid does the rest (arrival time, item carried or room). Matching the grids carries these facts across (item carried or room). Therefore, Octavian Hale is the thief and was in the Organ Loft; Bronwyn Orme was in the Projection Booth and carried a flashlight; Matilda Orsini carried a spare bulb.
- Step 6** By clue 8, Bronwyn Orme did not arrive at 6:00 PM. Crossing off the grid does the rest (arrival time). Therefore, Bronwyn Orme arrived at 6:15 PM; Matilda Orsini arrived at 6:00 PM.

THE ANSWER	Octavian Hale took the rare anniversary film reel. Bronwyn Orme was in the Projection Booth, carried a flashlight and arrived at 6:15 PM. Matilda Orsini was in the Ticket Foyer, carried a spare bulb and arrived at 6:00 PM. Octavian Hale was in the Organ Loft, carried a clipboard and arrived at 6:45 PM. Quentin Tillerman was in the Manager's Office, carried a roll of tickets and arrived at 6:30 PM.
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About this pack

The Detective's Logic Casebook is a paperback of 40 original detective logic mysteries in four levels, each with a grid, evidence, three hints and a step-by-step solution. It is coming soon from MindGrid Books.

The three cases in this pack were written for this bonus and are not taken from the paperback. Their logic was checked by a solver: each has exactly one solution and none needs a guess.

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Characters, places and events are invented; any resemblance to real people or events is coincidental. You may print this pack for your own use.

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