

## Deduction Mysteries

### CASE 01

A sealed wine bottle was taken from the prep kitchen of The Briar Room between 03:30 and 05:30. The operation required specific qualifications and access. 7 suspects: Penelope (head chef), Wren (host), Yusuf (pastry chef), Gunnar (bartender), Idris (line cook), Quentin (dishwasher), Yara (sommelier).

#### Q Who took the sealed wine bottle?

1. Idris's cellar key was revoked two weeks prior; archived access list confirms.
2. Yara's cellar key was revoked two weeks prior; archived access list confirms.
3. Gunnar stated they left the building at 22:45, but the elevator log shows their cellar key active at 03:30.
4. Idris was seen near the prep kitchen earlier that evening, but they had left the building by 20:55 and never returned.
5. A trace at the scene – a digital certificate issued only to senior staff – matches inventory accessible only to Gunnar.
6. Yusuf lacks the required professional expertise – confirmed by personnel records.
7. Three independent requirements: professional expertise, cellar key access, and presence at the prep kitchen during the 03:30-05:30 window.
8. The theft required a digital certificate issued only to senior staff.
9. Penelope's time-clock record shows continuous presence in a separate building.
- 10 Wren was at a documented training during the window – verified by kitchen camera.
- 11 Quentin's cellar key was revoked two weeks prior; archived access list confirms.
- 12 Gunnar has all three required qualifications.

### CASE 02

An archive password log was taken from the periodicals room of Helix Reading Room between 02:30 and 04:45. The operation required specific qualifications and access. 6 suspects: Octavia (rare-books curator), Mateo (visiting scholar), Phaedra (cataloger), Sora (reference librarian), Wren (research assistant), Jacinta (intern).

#### Q Who took the archive password log?

1. Wren has all three required qualifications.
2. A trace at the scene – a specific paint formulation only stocked in the restoration lab – matches inventory accessible only to Wren.
3. Octavia's archive badge was revoked two weeks prior; archived access list confirms.
4. Octavia was seen near the rare books vault earlier that evening, but they had left the building by 20:55 and never returned.
5. Mateo had the qualifications but was on a flight during the window – third-party verified.
6. Three independent requirements: professional training, archive badge access, and presence at the periodicals room during the 02:30-04:45 window.
7. Wren stated they left the building at 22:00, but the network authentication record shows their staff key active at 02:30.
8. The theft required a specific paint formulation only stocked in the restoration lab.
9. Phaedra's book-checkout record shows continuous presence in a separate building.
- 10 Jacinta's archive badge was revoked two weeks prior; archived access list confirms.
- 11 Sora was at a documented hospital appointment during the window – verified by witness patron.

## Deduction Mysteries

### CASE 03

The student transcripts were taken from the staff bathroom of Brierfield Prep between 00:45 and 02:30. The operation required specific qualifications and access. 7 suspects: Ines (school counselor), Cyrus (principal), Penelope (department head), Xiomara (substitute teacher), Cosima (librarian), Eleni (secretary), Roksana (teacher).

#### Q Who took the student transcripts?

1. Eleni had the qualifications but was hospitalized during the window – third-party verified.
2. A trace at the scene – a unique encryption signature traceable to internal-only training – matches inventory accessible only to Xiomara.
3. Xiomara stated they left the building at 23:25, but the door sensor history shows their master key active at 00:45.
4. Cyrus's hallway camera shows continuous presence in a separate building.
5. The theft required a unique encryption signature traceable to internal-only training.
6. Xiomara has all three required qualifications.
7. Eleni was seen near the records office earlier that evening, but they had left the building by 20:55 and never returned.
8. Roksana had the qualifications but family was visiting during the window – third-party verified.
9. Penelope was at a documented conference during the window – verified by attendance log.
- 10 Three independent requirements: professional training, keypad code access, and presence at the . staff bathroom during the 00:45-02:30 window.
- 11 Ines's keypad code was revoked two weeks prior; archived access list confirms.

### CASE 04

A signed binary release was extracted from the war room of Solstice Labs between 01:45 and 03:45. The operation required specific qualifications and access. 7 suspects: Bao (data scientist), Galina (CTO), Akira (support lead), Lucia (security analyst), Odell (site-reliability engineer), Elara (senior engineer), Helena (contractor).

#### Q Who extracted the signed binary release?

1. Akira lacks the required professional training – confirmed by personnel records.
2. Elara stated they left the building at 23:05, but the elevator log shows their admin token active at 01:45.
3. A trace at the scene – a unique encryption signature traceable to internal-only training – matches inventory accessible only to Elara.
4. Galina's SSH key was revoked two weeks prior; archived access list confirms.
5. Bao lacks the required professional training – confirmed by personnel records.
6. Elara has all three required qualifications.
7. Lucia's SSH key was revoked two weeks prior; archived access list confirms.
8. The data theft required a unique encryption signature traceable to internal-only training.
9. Helena had the qualifications but was hospitalized during the window – third-party verified.
- 10 Three independent requirements: professional training, SSH key access, and presence at the war . room during the 01:45-03:45 window.
- 11 Bao was seen near the network closet earlier that evening, but they had left the building by . 20:50 and never returned.
- 12 Odell's CCTV camera shows continuous presence in a separate building.

## Deduction Mysteries

### CASE 05

A referee's notebook was taken from the equipment room of Helix Sports Complex between 03:30 and 05:15. The operation required specific qualifications and access. 7 suspects: Dimitri (assistant coach), Elara (team statistician), Thora (head coach), Hakim (referee), Nadia (facilities manager), Roksana (team captain), Yara (rookie player).

#### Q Who took the referee's notebook?

1. Yara's equipment sign-out shows continuous presence in a separate building.
2. Elara's locker-room sensor shows continuous presence in a separate building.
3. Nadia had the qualifications but was hospitalized during the window – third-party verified.
4. Thora was at a documented training during the window – verified by locker-room sensor.
5. Roksana stated they left the building at 23:20, but the door sensor history shows their facility badge active at 03:30.
6. Dimitri was at a documented conference during the window – verified by locker-room sensor.
7. Three independent requirements: professional training, equipment-room key access, and presence at the equipment room during the 03:30–05:15 window.
8. The theft required a specific paint formulation only stocked in the restoration lab.
9. Roksana has all three required qualifications.
- 10 Hakim was seen near the locker room earlier that evening, but they had left the building by . 21:00 and never returned.
- 11 Hakim's equipment-room key was revoked two weeks prior; archived access list confirms.
- 12 A trace at the scene – a specific paint formulation only stocked in the restoration lab – . matches inventory accessible only to Roksana.

### CASE 06

The sealed wills were taken from the administrator office of Northgate Estate Archive between 00:00 and 02:30. The operation required specific qualifications and access. 7 suspects: Yusuf (volunteer), Faye (head archivist), Helena (records administrator), Kiran (clerk), Kalisa (researcher), Mahdi (administrator), Elspeth (genealogist).

#### Q Who took the sealed wills?

1. A trace at the scene – a specific paint formulation only stocked in the restoration lab – matches inventory accessible only to Kiran.
2. Faye had the qualifications but was hospitalized during the window – third-party verified.
3. Kalisa was at a documented training during the window – verified by witness patron.
4. Kiran has all three required qualifications.
5. Elspeth lacks the required professional expertise – confirmed by personnel records.
6. Yusuf's vault entry record shows continuous presence in a separate building.
7. Kiran stated they left the building at 22:45, but the badge access record shows their research-room pass active at 00:00.
8. The theft required a specific paint formulation only stocked in the restoration lab.
9. Three independent requirements: professional expertise, research-room pass access, and presence at the administrator office during the 00:00–02:30 window.
- 10 Helena was seen near the conservation room earlier that evening, but they had left the . building by 20:05 and never returned.
- 11 Helena's research-room pass was revoked two weeks prior; archived access list confirms.
- 12 Mahdi's research-room pass was revoked two weeks prior; archived access list confirms.

## Answer Key – Deduction Mysteries

Solve before peeking. Correct suspect and key reasoning steps below.

---

### Case 01 A) Gunnar

- ☒ Three requirements (professional expertise, cellar key, presence at the prep kitchen during the 03:30-05:30 window) plus a technical trace narrow this case.
  - ☒ Penelope eliminated by alibi or missing qualification.
- 

### Case 02 F) Wren

- ☒ Three requirements (professional training, archive badge, presence at the periodicals room during the 02:30-04:45 window) plus a technical trace narrow this case.
  - ☒ Octavia eliminated by alibi or missing qualification.
- 

### Case 03 E) Xiomara

- ☒ Three requirements (professional training, keypad code, presence at the staff bathroom during the 00:45-02:30 window) plus a technical trace narrow this case.
  - ☒ Ines eliminated by alibi or missing qualification.
- 

### Case 04 D) Elara

- ☒ Three requirements (professional training, SSH key, presence at the war room during the 01:45-03:45 window) plus a technical trace narrow this case.
  - ☒ Bao eliminated by alibi or missing qualification.
- 

### Case 05 undefined) Roksana

- ☒ Three requirements (professional training, equipment-room key, presence at the equipment room during the 03:30-05:15 window) plus a technical trace narrow this case.
  - ☒ Dimitri eliminated by alibi or missing qualification.
- 

### Case 06 undefined) Kiran

- ☒ Three requirements (professional expertise, research-room pass, presence at the administrator office during the 00:00-02:30 window) plus a technical trace narrow this case.
  - ☒ Yusuf eliminated by alibi or missing qualification.
-