

## Deduction Mysteries

### CASE 01

A rare vintage tool was taken from the tool crib of Saint-Clair Machining between 02:15 and 04:15. The operation required specific qualifications and access. 6 suspects: Emiko (shop manager), Octavia (painter), Theo (machinist), Bjorn (apprentice), Yusuf (master mechanic), Etienne (parts clerk).

#### Q Who took the rare vintage tool?

1. Bjorn stated they left the building at 23:10, but the DHCP server log shows their parts-room code active at 02:15.
2. Yusuf's parts-room audit shows continuous presence in a separate building.
3. Emiko's witness coworker shows continuous presence in a separate building.
4. Octavia's shop key was revoked two weeks prior; archived access list confirms.
5. Theo's shop key was revoked two weeks prior; archived access list confirms.
6. Three independent requirements: professional training, shop key access, and presence at the tool crib during the 02:15-04:15 window.
7. The theft required a stamped seal serial number from a controlled supply closet.
8. Bjorn has all three required qualifications.
9. Etienne lacks the required professional training – confirmed by personnel records.
- 10 Theo was seen near the blueprint room earlier that evening, but they had left the building by . 20:40 and never returned.
- 11 A trace at the scene – a stamped seal serial number from a controlled supply closet – matches

. inventory accessible only to Bjorn.					
A) Yusuf	B) Emiko	C) Octavia	D) Theo	E) Bjorn	F) Etienne

### CASE 02

A birth certificate was taken from the archive stacks of Northgate Estate Archive between 00:00 and 02:30. The operation required specific qualifications and access. 7 suspects: Akhil (clerk), Anastasia (head archivist), Gemma (conservation specialist), Kasper (records administrator), Yara (administrator), Elspeth (volunteer), Hiroshi (researcher).

#### Q Who took the birth certificate?

1. Hiroshi has all three required qualifications.
2. Elspeth was at a documented conference during the window – verified by vault entry record.
3. A trace at the scene – a stamped seal serial number from a controlled supply closet – matches inventory accessible only to Hiroshi.
4. Anastasia lacks the required professional expertise – confirmed by personnel records.
5. Gemma's admin code was revoked two weeks prior; archived access list confirms.
6. Kasper's admin code was revoked two weeks prior; archived access list confirms.
7. Hiroshi stated they left the building at 23:25, but the network authentication record shows their vault key active at 00:00.
8. Three independent requirements: professional expertise, admin code access, and presence at the archive stacks during the 00:00-02:30 window.
9. Yara was at a documented training during the window – verified by badge swipe.
- 10 Akhil had the qualifications but was on a flight during the window – third-party verified.
- 11 Yara was seen near the administrator office earlier that evening, but they had left the . building by 21:35 and never returned.
- 12 The theft required a stamped seal serial number from a controlled supply closet.

## Deduction Mysteries

### CASE 03

A formula draft was swapped from the autoclave room of Nordic Bio between 03:00 and 05:00. The operation required specific qualifications and access. 6 suspects: Suri (postdoctoral researcher), Jacinta (operations manager), Octavia (visiting scientist), Jules (equipment manager), Gisela (principal investigator), Penelope (lab technician).

#### Q Who swapped the formula draft?

1. Octavia stated they left the building at 23:55, but the elevator log shows their clean-room access active at 03:00.
2. Penelope's equipment timestamp shows continuous presence in a separate building.
3. Octavia has all three required qualifications.
4. Suri's freezer access log shows continuous presence in a separate building.
5. Gisela lacks the required professional expertise – confirmed by personnel records.
6. Jacinta was at a documented training during the window – verified by clean-room entry log.
7. Suri was seen near the sequencing room earlier that evening, but they had left the building by 21:05 and never returned.
8. The sample tampering required a stamped seal serial number from a controlled supply closet.
9. Jules lacks the required professional expertise – confirmed by personnel records.
- 10 Three independent requirements: professional expertise, freezer key access, and presence at the autoclave room during the 03:00–05:00 window.
- 11 A trace at the scene – a stamped seal serial number from a controlled supply closet – matches

. inventory accessible only to Octavia.					
A) Suri	B) Octavia	C) Jacinta	D) Jules	E) Penelope	F) Gisela

### CASE 04

A rare first edition was taken from the special collections room of Helix Reading Room between 01:00 and 03:15. The operation required specific qualifications and access. 7 suspects: Yara (archivist), Kasper (reference librarian), Alejandro (custodian), Elara (head librarian), Simeon (visiting scholar), Hattie (volunteer), Eira (research assistant).

#### Q Who took the rare first edition?

1. Simeon lacks the required professional certification – confirmed by personnel records.
2. Elara had the qualifications but was on a flight during the window – third-party verified.
3. Hattie has all three required qualifications.
4. Eira lacks the required professional certification – confirmed by personnel records.
5. Three independent requirements: professional certification, archive badge access, and presence at the special collections room during the 01:00–03:15 window.
6. The theft required a custom-machined tool stocked only in equipment closet B.
7. Yara's archive log shows continuous presence in a separate building.
8. Hattie stated they left the building at 22:00, but the door sensor history shows their archive badge active at 01:00.
9. Kasper was seen near the microfilm area earlier that evening, but they had left the building by 20:45 and never returned.
- 10 Kasper's archive badge was revoked two weeks prior; archived access list confirms.
- 11 Alejandro lacks the required professional certification – confirmed by personnel records.
- 12 A trace at the scene – a custom-machined tool stocked only in equipment closet B – matches . inventory accessible only to Hattie.

## Deduction Mysteries

### CASE 05

A sealed reagent was swapped from the prep bench of Caelum Labs between 03:00 and 05:45. The operation required specific qualifications and access. 6 suspects: Alejandro (clinical coordinator), Kerensa (postdoctoral researcher), Galina (graduate student), Oren (principal investigator), Hasan (undergraduate volunteer), Mei (operations manager).

#### Q Who swapped the sealed reagent?

1. Galina stated they left the building at 22:20, but the parking-lot camera shows their biohazard clearance active at 03:00.
2. Kerensa had the qualifications but family was visiting during the window – third-party verified.
3. Mei's witness sighting shows continuous presence in a separate building.
4. A trace at the scene – a specific paint formulation only stocked in the restoration lab – matches inventory accessible only to Galina.
5. Hasan's clean-room entry log shows continuous presence in a separate building.
6. Three independent requirements: professional training, lab badge access, and presence at the prep bench during the 03:00-05:45 window.
7. Mei was seen near the glove box earlier that evening, but they had left the building by 20:05 and never returned.
8. Alejandro's lab badge was revoked two weeks prior; archived access list confirms.
9. Oren was at a documented hospital appointment during the window – verified by freezer access log.
- 10 Galina has all three required qualifications.
- 11 The sample tampering required a specific paint formulation only stocked in the restoration lab.

### CASE 06

A formula draft was swapped from the glove box of Brightline Sciences between 03:15 and 05:30. The operation required specific qualifications and access. 7 suspects: Beatrix (clinical coordinator), Darya (principal investigator), Stellan (safety officer), Tomas (graduate student), Frida (postdoctoral researcher), Dimah (lab technician), Wilder (equipment manager).

#### Q Who swapped the formula draft?

1. Beatrix's clean-room entry log shows continuous presence in a separate building.
2. The sample tampering required a specific paint formulation only stocked in the restoration lab.
3. Frida lacks the required professional training – confirmed by personnel records.
4. Dimah lacks the required professional training – confirmed by personnel records.
5. Darya's freezer key was revoked two weeks prior; archived access list confirms.
6. Wilder has all three required qualifications.
7. Wilder stated they left the building at 22:55, but the door sensor history shows their lab badge active at 03:15.
8. Stellan's freezer key was revoked two weeks prior; archived access list confirms.
9. Three independent requirements: professional training, freezer key access, and presence at the glove box during the 03:15-05:30 window.
- 10 A trace at the scene – a specific paint formulation only stocked in the restoration lab – matches inventory accessible only to Wilder.
- 11 Tomas's badge swipe shows continuous presence in a separate building.
- 12 Stellan was seen near the equipment closet earlier that evening, but they had left the building by 21:50 and never returned.

## Answer Key – Deduction Mysteries

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

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### Case 01 E) Bjorn

- ☒ Three requirements (professional training, shop key, presence at the tool crib during the 02:15-04:15 window) plus a technical trace narrow this case.
  - ☒ Emiko eliminated by alibi or missing qualification.
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### Case 02 F) Hiroshi

- ☒ Three requirements (professional expertise, admin code, presence at the archive stacks during the 00:00-02:30 window) plus a technical trace narrow this case.
  - ☒ Akhil eliminated by alibi or missing qualification.
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### Case 03 B) Octavia

- ☒ Three requirements (professional expertise, freezer key, presence at the autoclave room during the 03:00-05:00 window) plus a technical trace narrow this case.
  - ☒ Suri eliminated by alibi or missing qualification.
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### Case 04 F) Hattie

- ☒ Three requirements (professional certification, archive badge, presence at the special collections room during the 01:00-03:15 window) plus a technical trace narrow this case.
  - ☒ Yara eliminated by alibi or missing qualification.
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### Case 05 D) Galina

- ☒ Three requirements (professional training, lab badge, presence at the prep bench during the 03:00-05:45 window) plus a technical trace narrow this case.
  - ☒ Alejandro eliminated by alibi or missing qualification.
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### Case 06 B) Wilder

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