

## Deduction Mysteries

### CASE 01

An accounting ledger was taken from the data center of Cedarstone Inc during the overnight window between 00:00 and 03:00. The operation required specific qualifications, access, and timing. 7 suspects are under investigation: Kenji (senior engineer), Ramona (security officer), Alessio (HR director), Theo (executive assistant), Indira (CFO), Magnus (facilities coordinator), Nadia (intern). Several have strong-looking motives.

#### Q Who took the accounting ledger?

1. Indira lacks specialized engineering certification – confirmed by personnel records.
2. The corporate theft involved a seal cut with a serial pattern from a specific supply.
3. Nadia has familiarity with the security routing and documented hands-on history with the item and specialized engineering certification – initial suspicion was high.
4. The trace at the scene (a seal cut with a serial pattern from a specific supply) ties directly to inventory or systems uniquely accessible to Theo.
5. Four independent requirements: specialized engineering certification, documented hands-on history with the item, presence between 00:00 and 03:00, and familiarity with the security routing.
6. Nadia filed a grievance two weeks ago – appears to have motive.
7. Kenji's VPN session log shows them off-site the entire window.
8. Magnus clashed publicly with management – appears to have motive.
9. Theo has all four requirements: specialized engineering certification, documented hands-on history with the item, familiarity with the security routing, and meets the temporal requirement (presence between 00:00 and 03:00).
- 10 Magnus has specialized engineering certification and documented hands-on history with the item – initial suspicion was high.
- 11 But: however the parking-lot camera shows their vehicle remained in the lot until well after 00:00.

### CASE 02

A special collection key was taken from the rare books vault of Aldermarsh Library during the overnight window between 01:45 and 05:45. The operation required specific qualifications, access, and timing. 8 suspects are under investigation: Zephyr (visiting scholar), Quentin (rare-books curator), Mei (reference librarian), Mauro (volunteer), Arjun (intern), Alejandro (head librarian), Tariq (cataloger), Phaedra (research assistant). Several have strong-looking motives.

#### Q Who took the special collection key?

1. Quentin's security camera shows them off-site the entire window.
2. The theft involved a hand-machined tool stocked in only one closet.
3. Tariq their video call ended at 23:45 according to the system.
4. Alejandro has knowledge of the seal serial pattern and specialized engineering certification and after-hours building access – initial suspicion was high.
5. Phaedra's badge swipe shows them off-site the entire window.
6. Tariq has all four requirements: specialized engineering certification, after-hours building access, knowledge of the seal serial pattern, and meets the temporal requirement (presence between 01:45 and 05:45).
7. However: Mauro is cleared – but two independent witnesses confirm a video call with them throughout the window.
8. Initial assumption pointed to Zephyr because of proximity to the scene earlier, but this has been independently ruled out.
9. But: however the VPN session record shows their vehicle remained in the lot until well after 01:45.
- 10 However: Alejandro is cleared – but their staff key was revoked the day before – confirmed in the security audit.

## Deduction Mysteries

### CASE 03

A research notebook was swapped from the glove box of Caelum Labs during the overnight window between 01:00 and 04:15. The operation required specific qualifications, access, and timing. 8 suspects are under investigation: Bjorn (equipment manager), Omari (lab technician), Nizar (clinical coordinator), Tariq (postdoctoral researcher), Mira (visiting scientist), Lana (undergraduate volunteer), Lior (graduate student), Yara (principal investigator). Several have strong-looking motives.

#### Q Who swapped the research notebook?

1. Lana claims to have exited the building at 22:10 – the official badge log confirms this.
2. But: however elevator override log records show they re-authenticated from an internal network at 2:10.
3. Mira's clean-room entry log shows them off-site the entire window.
4. However: Omari is cleared – but two independent witnesses confirm a video call with them throughout the window.
5. The trace at the scene (a foam replica skillfully painted with restoration-grade spray paint) ties directly to inventory or systems uniquely accessible to Lana.
6. Yara's equipment timestamp shows them off-site the entire window.
7. Tariq has clean-room or vault clearance and clearance to the restricted archive – initial suspicion was high.
8. However: Tariq is cleared – but two independent witnesses confirm a video call with them throughout the window.
9. Lior lacks clearance to the restricted archive – confirmed by personnel records.
- 10 However: Bjorn is cleared – but witness sighting places them at the hospital with a family emergency . during the entire window.

### CASE 04

A historical photograph was taken from the cataloging room of Saint-Clair Historical Society during the overnight window between 01:45 and 05:15. The operation required specific qualifications, access, and timing. 7 suspects are under investigation: Penelope (records administrator), Yvonne (clerk), Thora (head archivist), Nikolai (conservation specialist), Idris (genealogist), Bram (researcher), Noor (administrator). Several have strong-looking motives.

#### Q Who took the historical photograph?

1. Yvonne had financial pressure – appears to have motive.
2. However: Yvonne is cleared – but their research-room pass was revoked the day before – confirmed in the security audit.
3. However: Noor is cleared – but their research-room pass was revoked the day before – confirmed in the security audit.
4. Idris has only documented hands-on history with the item of the four requirements.
5. Penelope lacks clearance to the restricted archive – confirmed by personnel records.
6. Nikolai lacks clearance to the restricted archive – confirmed by personnel records.
7. Noor had financial pressure – appears to have motive.
8. Bram clashed publicly with management – appears to have motive.
9. Four independent requirements: clearance to the restricted archive, documented hands-on history with the item, presence between 01:45 and 05:15, and knowledge of the seal serial pattern.
- 10 Initial assumption pointed to Bram because of proximity to the scene earlier, but this has been . independently ruled out.
- 11 The trace at the scene (a seal cut with a serial pattern from a specific supply) ties directly to . inventory or systems uniquely accessible to Thora.

## Deduction Mysteries

### CASE 05

A signed manuscript was taken from the archive room of Metropolitan Gallery during the overnight window between 01:45 and 05:45. The operation required specific qualifications, access, and timing. 7 suspects are under investigation: Kerensa (tour guide), Zara (gift shop manager), Bao (security guard), Indira (exhibition designer), Tatum (docent), Frida (janitor), Joaquin (archivist). Several have strong-looking motives.

#### Q Who took the signed manuscript?

1. However: Kerensa is cleared – but motion sensor places them at the hospital with a family emergency during the entire window.
2. Tatum their video call ended at 23:15 according to the system.
3. Zara lacks documented hands-on history with the item – security audit confirms.
4. Initial assumption pointed to Kerensa because of proximity to the scene earlier, but this has been independently ruled out.
5. Indira's motion sensor shows them off-site the entire window.
6. Tatum has all four requirements: advanced restoration training, documented hands-on history with the item, familiarity with the security routing, and meets the temporal requirement (presence between 01:45 and 05:45).
7. Kerensa had financial pressure – appears to have motive.
8. Bao had financial pressure – appears to have motive.
9. However: Bao is cleared – but their elevator access was revoked the day before – confirmed in the security audit.
- 10 Four independent requirements: advanced restoration training, documented hands-on history with the item, presence between 01:45 and 05:45, and familiarity with the security routing.
- 11 The theft involved a hand-machined tool stocked in only one closet.

### CASE 06

A source code repository was extracted from the data archive of Solstice Labs during the overnight window between 00:15 and 03:15. The operation required specific qualifications, access, and timing. 7 suspects are under investigation: Sami (contractor), Odell (support lead), Tarek (CTO), Helena (DevOps lead), Polina (security analyst), Adrian (data scientist), Roksana (intern). Several have strong-looking motives.

#### Q Who extracted the source code repository?

1. Sami has clean-room or vault clearance and a master key issued only to senior staff – initial suspicion was high.
2. Tarek claims to have exited the building at 22:50 – the official badge log confirms this.
3. Polina has clean-room or vault clearance and knowledge of the seal serial pattern – initial suspicion was high.
4. However: Sami is cleared – but two independent witnesses confirm a video call with them throughout the window.
5. However: Helena is cleared – but VPN session log places them at the hospital with a family emergency during the entire window.
6. Tarek has all four requirements: a master key issued only to senior staff, clean-room or vault clearance, knowledge of the seal serial pattern, and meets the temporal requirement (presence between 00:15 and 03:15).
7. The trace at the scene (a foam replica skillfully painted with restoration-grade spray paint) ties directly to inventory or systems uniquely accessible to Tarek.
8. Helena has clean-room or vault clearance and knowledge of the seal serial pattern and a master key issued only to senior staff – initial suspicion was high.
9. But: however the parking-lot camera shows their vehicle remained in the lot until well after 00:15.

## Answer Key – Deduction Mysteries

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

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### Case 01 D) Theo

- ☒ Four requirements (specialized engineering certification, documented hands-on history with the item, presence between 00:00 and 03:00, familiarity with the security routing) plus a unique technical trace narrow the case.
  - ☒ Ramona appears guilty (has multiple requirements, has motive) but is cleared by an independent verification.
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### Case 02 D) Tariq

- ☒ Four requirements (specialized engineering certification, after-hours building access, presence between 01:45 and 05:45, knowledge of the seal serial pattern) plus a unique technical trace narrow the case.
  - ☒ Mei appears guilty (has multiple requirements, has motive) but is cleared by an independent verification.
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### Case 03 E) Lana

- ☒ Four requirements (clearance to the restricted archive, clean-room or vault clearance, presence between 01:00 and 04:15, familiarity with the security routing) plus a unique technical trace narrow the case.
  - ☒ Bjorn appears guilty (has multiple requirements, has motive) but is cleared by an independent verification.
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### Case 04 C) Thora

- ☒ Four requirements (clearance to the restricted archive, documented hands-on history with the item, presence between 01:45 and 05:15, knowledge of the seal serial pattern) plus a unique technical trace narrow the case.
  - ☒ Yvonne appears guilty (has multiple requirements, has motive) but is cleared by an independent verification.
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### Case 05 C) Tatum

- ☒ Four requirements (advanced restoration training, documented hands-on history with the item, presence between 01:45 and 05:45, familiarity with the security routing) plus a unique technical trace narrow the case.
  - ☒ Kerensa appears guilty (has multiple requirements, has motive) but is cleared by an independent verification.
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### Case 06 C) Tarek

- ☒ Four requirements (a master key issued only to senior staff, clean-room or vault clearance, presence between 00:15 and 03:15, knowledge of the seal serial pattern) plus a unique technical trace narrow the case.
  - ☒ Polina appears guilty (has multiple requirements, has motive) but is cleared by an independent verification.
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