

## Deduction Mysteries

### CASE 01

The quarterly financials were extracted from the data archive of Meridian Data during the overnight window between 01:15 and 04:30. The operation required specific qualifications, access, and timing. 8 suspects are under investigation: Wren (site-reliability engineer), Phaedra (product manager), Lana (intern), Aiko (data scientist), Aurora (contractor), Nizar (senior engineer), Cyrus (CTO), Daphne (DevOps lead). Several have strong-looking motives.

#### Q Who extracted the quarterly financials?

1. The data theft involved a seal cut with a serial pattern from a specific supply.
2. Nizar claims to have exited the building at 23:55 – the official badge log confirms this.
3. Initial assumption pointed to Aiko because of proximity to the scene earlier, but this has been independently ruled out.
4. Aurora has familiarity with the security routing and administrator credentials and elevated system privileges – initial suspicion was high.
5. Aurora was passed over for a recent promotion – appears to have motive.
6. However: Aurora is cleared – but they were on a documented overnight flight, verified by airline records.
7. The trace at the scene (a seal cut with a serial pattern from a specific supply) ties directly to inventory on systems uniquely accessible to Nizar.
8. Phaedra was passed over for a recent promotion – appears to have motive.
9. Daphne clashed publicly with management – appears to have motive.
- 10 But: however seal serial registry records show they re-authenticated from an internal network at . 2:25.
- 11 However: Phaedra is cleared – but CCTV camera places them at the hospital with a family emergency . during the entire window.

### CASE 02

A medical kit was taken from the administration office of Brightline Fitness during the overnight window between 00:45 and 03:45. The operation required specific qualifications, access, and timing. 7 suspects are under investigation: Hattie (athletic trainer), Bayan (team captain), Tomas (assistant coach), Zoltan (equipment manager), Yara (team statistician), Saoirse (facilities manager), Tarek (head coach). Several have strong-looking motives.

#### Q Who took the medical kit?

1. However: Zoltan is cleared – but facility camera places them at the hospital with a family emergency during the entire window.
2. Zoltan was passed over for a recent promotion – appears to have motive.
3. Tarek's equipment sign-out shows them off-site the entire window.
4. Four independent requirements: clearance to the restricted archive, documented hands-on history with the item, presence between 00:45 and 03:45, and familiarity with the security routing.
5. The theft involved a network certificate signed by senior staff.
6. Bayan has all four requirements: clearance to the restricted archive, documented hands-on history with the item, familiarity with the security routing, and meets the temporal requirement (presence between 00:45 and 03:45).
7. Zoltan has documented hands-on history with the item and clearance to the restricted archive and familiarity with the security routing – initial suspicion was high.
8. However: Tomas is cleared – but they were on a documented overnight flight, verified by airline records.
9. Tomas has clearance to the restricted archive and documented hands-on history with the item and familiarity with the security routing – initial suspicion was high.
- 10 Bayan their video call ended at 23:15 according to the system.

## Deduction Mysteries

### CASE 03

A signed prescription pad was taken from the administrator office of Saint-Clair Hospital during the overnight window between 02:15 and 06:45. The operation required specific qualifications, access, and timing. 8 suspects are under investigation: Sigrid (volunteer), Quincy (medical resident), Isolde (pharmacist), Juno (technician), Kasper (administrator), Saoirse (attending physician), Jian (head nurse), Kenji (security officer). Several have strong-looking motives.

#### Q Who took the signed prescription pad?

1. The theft involved a network certificate signed by senior staff.
2. Four independent requirements: clearance to the restricted archive, administrator credentials, presence between 02:15 and 06:45, and possession of the specific tool used.
3. Kenji's door sensor shows them off-site the entire window.
4. However: Juno is cleared – but pharmacy CCTV places them at the hospital with a family emergency during the entire window.
5. However: Saoirse is cleared – but two independent witnesses confirm a video call with them throughout the window.
6. Jian their video call ended at 23:55 according to the system.
7. Sigrid has possession of the specific tool used and clearance to the restricted archive and administrator credentials – initial suspicion was high.
8. But: however the unsecured pedestrian door doesn't require a badge to re-enter.
9. The trace at the scene (a network certificate signed by senior staff) ties directly to inventory or systems uniquely accessible to Jian.
- 10 Jian has all four requirements: clearance to the restricted archive, administrator credentials, possession of the specific tool used, and meets the temporal requirement (presence between 02:15 and 06:45).

### CASE 04

A sample vial was swapped from the equipment closet of Brightline Sciences during the overnight window between 02:00 and 06:15. The operation required specific qualifications, access, and timing. 8 suspects are under investigation: Faye (clinical coordinator), Kenji (equipment manager), Hiroshi (undergraduate volunteer), Ilya (graduate student), Zephyr (lab technician), Phaedra (visiting scientist), Xiomara (postdoctoral researcher), Lior (safety officer). Several have strong-looking motives.

#### Q Who swapped the sample vial?

1. Four independent requirements: elevated system privileges, a verified relationship with the donor, presence between 02:00 and 06:15, and authorization to handle the item.
2. Lior had financial pressure – appears to have motive.
3. Faye had financial pressure – appears to have motive.
4. The sample tampering involved a network certificate signed by senior staff.
5. The trace at the scene (a network certificate signed by senior staff) ties directly to inventory or systems uniquely accessible to Hiroshi.
6. Ilya has a verified relationship with the donor and elevated system privileges and authorization to handle the item – initial suspicion was high.
7. Zephyr's witness sighting shows them off-site the entire window.
8. Phaedra lacks a verified relationship with the donor – security audit confirms.
9. Hiroshi claims to have exited the building at 23:35 – the official badge log confirms this.
- 10 Xiomara lacks a verified relationship with the donor – security audit confirms.
- 11 Hiroshi has all four requirements: elevated system privileges, a verified relationship with the donor, authorization to handle the item, and meets the temporal requirement (presence between 02:00 and 06:15).

## Deduction Mysteries

### CASE 05

A sports trophy was taken from the records office of Northgate Academy during the overnight window between 01:15 and 05:15. The operation required specific qualifications, access, and timing. 7 suspects are under investigation: Ines (principal), Tarek (department head), Hasan (janitor), Faye (substitute teacher), Cosima (school counselor), Meriel (librarian), Esme (coach). Several have strong-looking motives.

#### Q Who took the sports trophy?

1. Faye claims to have exited the building at 23:50 – the official badge log confirms this.
2. Esme has knowledge of the seal serial pattern and after-hours building access – initial suspicion was high.
3. Hasan lacks after-hours building access – security audit confirms.
4. Esme filed a grievance two weeks ago – appears to have motive.
5. However: Ines is cleared – but hallway camera places them at the hospital with a family emergency during the entire window.
6. Ines has knowledge of the seal serial pattern and elevated system privileges and after-hours building access – initial suspicion was high.
7. However: Tarek is cleared – but their staff key was revoked the day before – confirmed in the security audit.
8. But: however the unsecured side stairwell doesn't require a badge to re-enter.
9. Faye has all four requirements: elevated system privileges, after-hours building access, knowledge of the seal serial pattern, and meets the temporal requirement (presence between 01:15 and 05:15).
10. However: Esme is cleared – but they were on a documented overnight flight, verified by airline records.
11. Ines filed a grievance two weeks ago – appears to have motive.

### CASE 06

A team trophy was taken from the press box of Aldermarsh Arena during the overnight window between 02:00 and 06:30. The operation required specific qualifications, access, and timing. 8 suspects are under investigation: Iolanthe (equipment manager), Cosima (athletic trainer), Tarek (head coach), Renata (assistant coach), Roksana (star player), Aleksandr (team captain), Darya (facilities manager), Xiomara (team statistician). Several have strong-looking motives.

#### Q Who took the team trophy?

1. Iolanthe has only familiarity with the security routing of the four requirements.
2. Tarek lacks documented hands-on history with the item – security audit confirms.
3. Four independent requirements: elevated system privileges, documented hands-on history with the item, presence between 02:00 and 06:30, and familiarity with the security routing.
4. But: however DHCP log records show they re-authenticated from an internal network at 1:55.
5. However: Roksana is cleared – but their team key was revoked the day before – confirmed in the security audit.
6. Roksana has elevated system privileges and documented hands-on history with the item and familiarity with the security routing – initial suspicion was high.
7. The theft involved a network certificate signed by senior staff.
8. Aleksandr's witness teammate shows them off-site the entire window.
9. Darya has familiarity with the security routing and elevated system privileges and documented hands-on history with the item – initial suspicion was high.
10. However: Cosima is cleared – but two independent witnesses confirm a video call with them throughout the window.
11. Xiomara has all four requirements: elevated system privileges, documented hands-on history with the item, familiarity with the security routing, and meets the temporal requirement (presence between 02:00 and 06:30).

## Answer Key – Deduction Mysteries

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

---

### Case 01 C) Nizar

- ☒ Four requirements (elevated system privileges, administrator credentials, presence between 01:15 and 04:30, familiarity with the security routing) plus a unique technical trace narrow the case.
  - ☒ Daphne appears guilty (has multiple requirements, has motive) but is cleared by an independent verification.
- 

### Case 02 A) Bayan

- ☒ Four requirements (clearance to the restricted archive, documented hands-on history with the item, presence between 00:45 and 03:45, familiarity with the security routing) plus a unique technical trace narrow the case.
  - ☒ Zoltan appears guilty (has multiple requirements, has motive) but is cleared by an independent verification.
- 

### Case 03 D) Jian

- ☒ Four requirements (clearance to the restricted archive, administrator credentials, presence between 02:15 and 06:45, possession of the specific tool used) plus a unique technical trace narrow the case.
  - ☒ Sigrid appears guilty (has multiple requirements, has motive) but is cleared by an independent verification.
- 

### Case 04 B) Hiroshi

- ☒ Four requirements (elevated system privileges, a verified relationship with the donor, presence between 02:00 and 06:15, authorization to handle the item) plus a unique technical trace narrow the case.
  - ☒ Ilya appears guilty (has multiple requirements, has motive) but is cleared by an independent verification.
- 

### Case 05 A) Faye

- ☒ Four requirements (elevated system privileges, after-hours building access, presence between 01:15 and 05:15, knowledge of the seal serial pattern) plus a unique technical trace narrow the case.
  - ☒ Tarek appears guilty (has multiple requirements, has motive) but is cleared by an independent verification.
- 

### Case 06 F) Xiomara

- ☒ Four requirements (elevated system privileges, documented hands-on history with the item, presence between 02:00 and 06:30, familiarity with the security routing) plus a unique technical trace narrow the case.
- ☒ Cosima appears guilty (has multiple requirements, has motive) but is cleared by an independent verification.