



# ANSWER

Let's break it down step by step.

## Given Information:

- 1 Machines available:** Bulldozer, Wheel Loader, Motor Grader, Dump Truck
- 2 Sectors available:** North, South, East, West
- 3 Operators:** Jake, Lisa, Mike, and You

## Applying the Clues:

- 1 Jake was working in the north sector.**
  - So, Jake cannot be in the South, East, or West.
  
- 2 The motor grader was not in the west sector.**
  - So, the motor grader must be in North, South, or East.

**3 The dump truck was not in the north or south sectors.**

- So, the dump truck must be in East or West.

**4 Lisa was not operating the bulldozer or the motor grader.**

- So, Lisa must have either the Wheel Loader or Dump Truck.

**5 The operator in the east sector was running a machine with a bucket.**

- Machines with buckets: **Wheel Loader & Dump Truck**
- This means that the east sector **cannot** have a bulldozer or motor grader.

**6 Mike was not in the south sector.**

- So, Mike must be in North, East, or West.

**Assigning Equipment:**

- **The east sector operator had a machine with a bucket → Must be the Wheel Loader or Dump Truck.**
- **The dump truck was in East or West →** If the dump truck was in the East, the wheel loader must be elsewhere.
- **Lisa could only have the Wheel Loader or Dump Truck →** If Lisa was in the East, she had the Wheel Loader.

So far, we have:

**Lisa was in the East with the Wheel Loader**

**Jake was in the North** → The available machines are Bulldozer or Motor Grader.

**The motor grader was NOT in the West** → If the motor grader was not in the West, it must be in the North or East.

But **we already placed the Wheel Loader in the East**, so the motor grader must be in the North.

**Jake was in the North with the Motor Grader**

That leaves **Mike and You for South and West.**

**Dump Truck must be in the West (since it wasn't allowed in North or South).**

**That means Mike (not in South) must be in the West.**

**Mike was in the West with the Dump Truck.**

That leaves:

**You were in the South with the Bulldozer.**

**Final Answer:**

- **Jake → North → Motor Grader**
- **Lisa → East → Wheel Loader**
- **Mike → West → Dump Truck**
- **You → South → Bulldozer**

**Looks like you, Jake, Lisa, and Mike are all in the clear. The person responsible for getting the excavator stuck is the excavator operator!**