# The Case of the Mayor's Red Office <br> By Kara Dusatko 

The Cast:
Police Chief
Cal Q.

Linda Fuller-Mayor<br>Beth Belisle-officer

Narrator: Midville Police Chief Arthur Smart and his 12-year-old sidekick Cal Q. stood staring in shock at the mayor's office. Everything-the ceiling, the walls, the carpet, the furniture- had been slopped with bright red paint. It was an unbelievable scene. Just then, the honorable Mideville mayor, Unda Fuller, stormed into the room.

Linda Fuller: "We must find out who did this." - turning to the Chief- "I want you to make finding this vandal your number-one priority, Chief."

Chief: "I've already got two of my best officers on this."
Cal: Taking out his notebook-"When did this happen, Chief?"
Chief: "This morning between 10:30-11:00. The entire staff was with the mayor at a dedication."

Narrator: Suddenly, the door swung open, and two Midville police officers arrived with three people. Two of the civilians, a man and a woman, wore painting overalls, which just happened to be covered with red paint. The third person, a gray-haired man in a three-piece suit, stood beside the painters, shaking his head in disbelief.

Beth Belisle: "Chief, we have some definite leads on this case." - she points to the grayhaired man and says-This is Ned Woodland, owner of Woodland Painting. The other two are, obviously, painters. They work for Mr. Woodland."

Chief: "What's the scoop here?"
Mr. Woodland: "These officers spotted my painters leaving work today and brought them in. I know they look like logical suspects because of the red paint, but they didn't do it. There's no way."

Cal: "Were you with them all morning, sir?"
Mr. Woodland: "Let me explain. Harry and Sue here are painting rooms in a hotel downtown. The hotel has 50 identical rooms, and they've done about half of them so far. Sometimes they work alone and sometimes together. I've timed them together many times and it takes them 2 hours as partners to do a room. I've also timed Sue when she's done a room alone, and it consistently takes her 6 hours. I've never timed Harry alone."

Chief: "But that still doesn't answer the kid's question."
Mr. Woodland: "O.K., I was with Sue virtually the entire morning, so I'm her alibi. I checked in on Harry at 7:00 a.m. when he was starting, and again at 11:15 when he had just finished. It takes 30 minutes to get to the mayor's office from the hotel. That's a onehour round trip. It must have taken 10 to 15 minutes to vandalize this office. That would leave Harry three hours to paint that room back at the hotel. I don't think he's capable of doing that - it takes Harry and Sue two hours together."

Chief: "Well, we'll never know if he's capable, will we? We don't have enough information to solve the math problem."

Linda Fuller: Yelling- "Aha!" -pointing to Harry- " I knew you looked familiar! You used to work for our town. I fired you last year for skipping work too many times. I'll bet you did this to get revenge."

Chief: "Sorry, Mayor, that's not proof, and remember we don't have enough math info to solve this case."

Cal: Holding up math notebook- "Yes, Chief, we DO have enough information. Not only did Harry have motive, but he also had the time. And here's the math to prove it."

## How did Cal figure that Harry had time to commit this act of vandalism?

HINT: Could use the least common multiple to help you figure this out.

