

Forensics



Police arrive at the scene of a crime at 1:22AM. They immediately take and record the temperature of the body they find there: 32.2°C . By the time they finish the inspection of the crime scene, it is 2:34AM. They again take the temperature of the body, which has dropped to 29.6°C , and have it sent to the morgue. The air temperature at the crime scene is measured to be 22.8°C . Assuming the air temperature has remained constant, approximately when could the person have been murdered, to the nearest minute? Assume the person had a normal body temperature of 36.5°C to 37.5°C . (Note: the rate of change of temperature of an object is directly proportional to the difference in the ambient temperature and the object's temperature.)