

Level D:

An eccentric clockmaker built three different clocks.

The first clock was a five-minute clock designed with an alarm set to sound each time the hand reached the number 2.

The second clock was a six-minute clock designed to sound each time the hand reached the number 3.

The third clock was a seven-minute clock designed to sound each time the hand reach the number 4.

The clockmaker started the clocks simultaneously on day, and each clock began to sound at its appropriate time. Was there a time when all three clocks sounded their alarms together? If so, tell when it occurred and explain why. If not, explain why not.