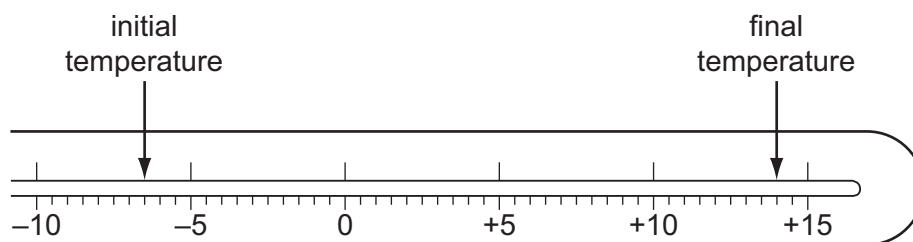
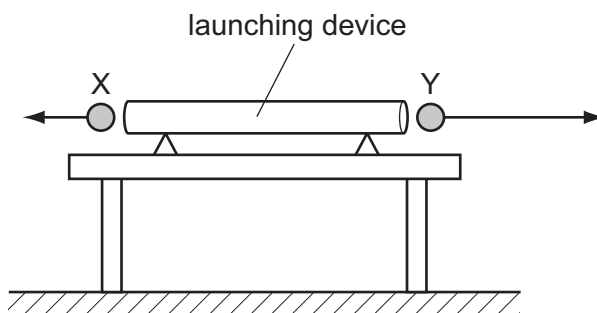


- 6 The diagram shows the stem of a Celsius thermometer, marked to show initial and final temperature values.



What is the temperature change expressed to an appropriate number of significant figures?

- A** 14 °C **B** 20.5 °C **C** 21 °C **D** 22.0 °C
- 7 A double-ended launching device fires two identical steel balls X and Y at exactly the same time. The diagram shows the initial velocities of the balls. They are both launched horizontally, but Y has greater speed.



Which statement explains what an observer would see?

- A** Both X and Y reach the ground simultaneously, because air resistance will cause both to have the same final speed.
- B** Both X and Y reach the ground simultaneously, because gravitational acceleration is the same for both.
- C** X reaches the ground before Y, because X lands nearer to the launcher.
- D** Y reaches the ground before X, because Y has greater initial speed.

Space for working