**5** Four students each made a series of measurements of the acceleration of free fall *g*. The table shows the results obtained.

Which set of results could be described as precise but **not** accurate?

|   | $g/\text{m}\text{s}^{-2}$ |       |      |      |
|---|---------------------------|-------|------|------|
| Α | 9.81                      | 9.79  | 9.84 | 9.83 |
| В | 9.81                      | 10.12 | 9.89 | 8.94 |
| С | 9.45                      | 9.21  | 8.99 | 8.76 |
| D | 8.45                      | 8.46  | 8.50 | 8.41 |

6 An object accelerates in a direction that is always perpendicular to its motion.

What is the effect, if any, of the acceleration on the object's speed and direction?

|   | speed    | direction |  |
|---|----------|-----------|--|
| Α | changes  | changes   |  |
| В | changes  | constant  |  |
| С | constant | changes   |  |
| D | constant | constant  |  |

7 The acceleration of free fall on a planet P is  $\frac{1}{6}$  of the acceleration of free fall on Earth.

The mass of a body on planet P is 30 kg.

What is its weight on planet P?

- **A** 4.9 N
- **B** 49 N
- **C** 180 N
- **D** 290 N