

## Soalan Subjektif

- I Acara larian pecut sejauh 100 meter sempena temasya sukan sekolah telah berlangsung. Rizal ingin menyiasat tentang faktor yang menyebabkan larian rakannya, Amirul sangat laju dan berjaya memenangi acara tersebut. Jadual 1 menunjukkan maklumat yang dikumpul oleh Rizal.

A 100-metre race is contested during the school's sports day. Rizal wants to investigate on the factors that cause his friend, Amirul to run the fastest and win the race. Table 1 shows the information gathered by Rizal.

| Atlet<br>Athlete | Jenis kasut<br>Type of shoes | Catatan masa larian (s)<br>Running time recorded |
|------------------|------------------------------|--|
| Amirul           | Kasut berpaku/Spiked shoes   | 11.60  |
| Thaqif           | Kasut sukan/Sport shoes      | 12.00  |
| Raju             | Kasut sekolah/School shoes   | 13.00  |
| Chew Meng        | Kasut sekolah/School shoes   | 12.80  |

Jadual 1/Table 1

Nota: Trek larian merupakan padang rumput./Note: The running track is on a grass field.

- (a) Selain daripada faktor kelajuan atlet, faktor lain seperti geseran juga penting dalam menentukan larian yang baik.

Apart from the factor of the athlete's speed, other factors such as friction is also important to determine a good run.

Apakah faktor geseran yang dimaksudkan?

What frictional factor is involved?

Jenis permukaan kasut  
Type of shoe surface

Jisim kasut  
Mass of shoes

[1 markah/mark]

- (b) Berdasarkan jawapan kamu di 1(a), nyatakan inferens yang menyebabkan Amirul berjaya mencatatkan masa terpantas. **KBAT** Menganalisis

Based on your answer in 1(a), state the inference that causes Amirul to record the fastest time.

Amirul recorded the fastest time because :

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[2 markah/marks]

- (c) Gariskan jawapan yang betul bagi pernyataan di bawah.

Underline the correct answer for the statement below.

Raju menyatakan yang dia tidak dapat berlari dengan laju kerana permukaan padang rumput agak licin. Daripada kenyataan Raju, geseran yang terhasil antara kasut Raju dan padang rumput adalah (rendah , tinggi). Maka, Raju perlu mengetahui cara untuk (mengurangkan , menambahkan) geseran.

Raju stated that he could not run fast as the surface of the grass field was slippery. Based on his statement, the friction produced between Raju's shoes and the grass field was (low , high). Therefore, he needs to discover the way to ( reduce , increase ) the friction.

[2 markah/marks]