

- 1 Lengkapkan peta pokok di bawah tentang jenis ralat. TP2
Complete the tree map below about the types of error.

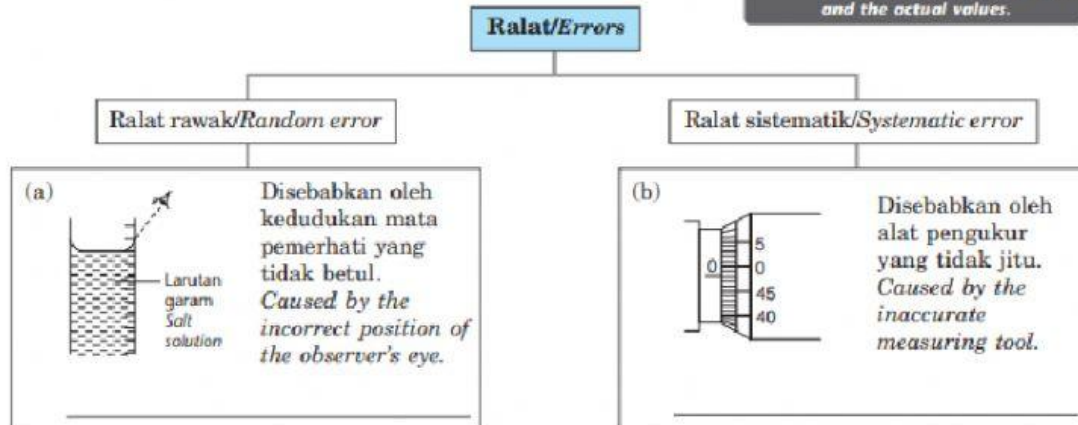
Ralat sifar
Zero error

Ralat paralaks
Parallax error

Ingat!

Ralat ialah perbezaan antara nilai ukuran dengan nilai sebenar.

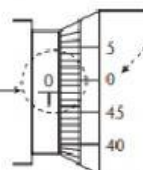
Errors are the differences between the measured values and the actual values.



- 2 Kenal pasti jenis ralat. Tandakan (✓) pada jawapan yang betul. TP2
Identify the types of error. Mark (✓) for the correct answer.

(a) ☐ Ralat paralaks
Parallax error

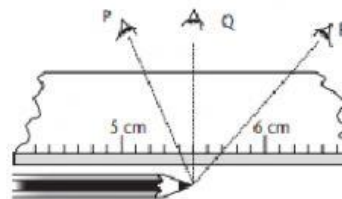
(b) ☐ Ralat sifar
Zero error



(a) ☐ Ralat paralaks
Parallax error

(b) ☐ Ralat sifar
Zero error

- 3 Azmir ingin mengukur panjang sebatang pensel. TP3/KBAT
Azmir wants to measure the length of a pencil.



- (a) Bulatkan kedudukan mata yang betul semasa mengambil bacaan pada rajah di atas.
Circle the correct position of the eye when taking the reading on the above diagram.
- (b) Berapakah panjang pensel?
What is the length of the pencil?
_____ cm
- (c) Apakah kedudukan mata Azmir yang akan menyebabkan ralat paralaks? Bulatkan jawapan.
What are the positions of Azmir's eye which will result in parallax errors? Circle the answers.

P	Q	R
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1.8

AKTIVITI PERBINCANGAN

Angkup vernier dan tolok skru mikrometer

Vernier calipers and micrometer screw gauge

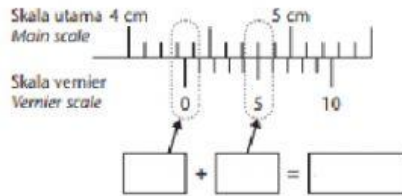
PBD Masteri

Buku teks m/s 22 – 23

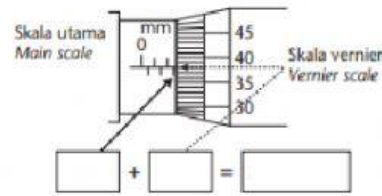
Rekodkan bacaan panjang objek/Record the readings of the length of the objects. TP3/KBAT

1 Anggalkan tiada ralat sifar/Assume that there are no zero error

(a) Angkup vernier/Vernier calipers



(b) Tolok skru mikrometer/Micrometer screw gauge



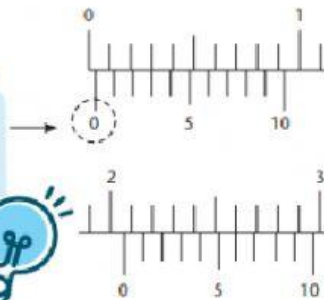
2 Terdapat ralat sifar/Zero error is present

Bacaan yang betul = bacaan diperoleh – ralat sifar
Correct reading = reading obtained – zero error

(a)

Tips!

Ralat sifar:
'0' ini di depan '0' (di atas), baca dari kiri. Ralat sifar ialah '+'.
Zero error:
This '0' is in front of the '0' (above), read from the left. The zero error is '+'.

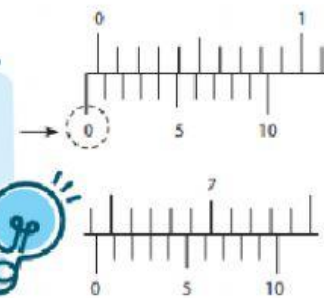


Ralat sifar/Zero error = _____ cm
Bacaan betul/Correct reading
= _____

(b)

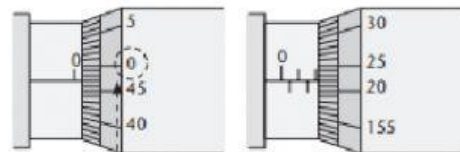
Tips!

Ralat sifar:
'0' ini di belakang '0' (di atas), baca dari kanan. Ralat sifar ialah '-'.
Zero error:
This '0' is behind the '0' (above), read from the right. The zero error is '-'.



Ralat sifar/Zero error = _____ cm
Bacaan betul/Correct reading
= _____

(c) Tolok skru mikrometer/Micrometer screw gauge



Tips!

Ralat sifar:
'0' ini di atas '0' di kiri, ralat sifar ialah '-'.
Zero error:
This '0' is above the '0' on the left; the zero error is '-'.

Ralat sifar/Zero error = _____ cm
Bacaan betul/Correct reading

Tips!

Ralat sifar:
Jika '0' di bawah '0' di kiri, ralat sifar ialah '+'.
Zero error:
If the '0' is below the '0' on the left, the zero error is '+'.