Tukarkan nombor perduaan yang berikut kepada nombor perlapanan menggunakan kaedah pengiraan. **TP 3**

(a) $1010110110_2$ = $1266_8$

| | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Nombor perduaan** | | | 1 | 0 | 1 | 0 | 1 | 1 | 0 | 1 | 1 | 0 |
| **Kumpulan tiga digit** | 0 | 0 | 1 | 0 | 1 | 0 | 1 | 1 | 0 | 1 | 1 | 0 |
| **Nilai tempat** | $2^2$ | $2^1$ | $2^0$ | $2^2$ | $2^1$ | $2^0$ | $2^2$ | $2^1$ | $2^0$ | $2^2$ | $2^1$ | $2^0$ |
| **Hasil darab** | $0 \times 4$ | $0 \times 2$ | $1 \times 1$ | $0 \times 4$ | $1 \times 2$ | $0 \times 1$ | $1 \times 4$ | $1 \times 2$ | $0 \times 1$ | $1 \times 4$ | $1 \times 2$ | $0 \times 1$ |
| **Hasil tambah** | $0 + 0 + 1 = 1$ | | | $0 + 2 + 0 = 2$ | | | $4 + 2 + 0 = 6$ | | | $4 + 2 + 0 = 6$ | | |
| **Nombor perlapanan** | 1 | | | 2 | | | 6 | | | 6 | | |

(b) $111000101011_2$ = $7053_8$

| | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Nombor perduaan** | 1 | 1 | 1 | 0 | 0 | 0 | 1 | 0 | 1 | 0 | 1 | 1 |
| **Kumpulan tiga digit** | 1 | 1 | 1 | 0 | 0 | 0 | 1 | 0 | 1 | 0 | 1 | 1 |
| **Nilai tempat** | $2^2$ | $2^1$ | $2^0$ | $2^2$ | $2^1$ | $2^0$ | $2^2$ | $2^1$ | $2^0$ | $2^2$ | $2^1$ | $2^0$ |
| **Hasil darab** | $1 \times 4$ | $1 \times 2$ | $1 \times 1$ | $0 \times 4$ | $0 \times 2$ | $0 \times 1$ | $1 \times 4$ | $0 \times 2$ | $1 \times 1$ | $0 \times 4$ | $1 \times 2$ | $1 \times 1$ |
| **Hasil tambah** | $4 + 2 + 1 = 7$ | | | $0 + 0 + 0 = 0$ | | | $4 + 0 + 1 = 5$ | | | $0 + 2 + 1 = 3$ | | |
| **Nombor perlapanan** | 7 | | | 0 | | | 5 | | | 3 | | |

(c) $10101001111_2$ = $2517_8$

| | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Nombor perduaan** | | 1 | 0 | 1 | 0 | 1 | 0 | 0 | 1 | 1 | 1 | 1 |
| **Kumpulan tiga digit** | 0 | 1 | 0 | 1 | 0 | 1 | 0 | 0 | 1 | 1 | 1 | 1 |
| **Nilai tempat** | $2^2$ | $2^1$ | $2^0$ | $2^2$ | $2^1$ | $2^0$ | $2^2$ | $2^1$ | $2^0$ | $2^2$ | $2^1$ | $2^0$ |
| **Hasil darab** | $0 \times 4$ | $1 \times 2$ | $0 \times 1$ | $1 \times 4$ | $0 \times 2$ | $1 \times 1$ | $0 \times 4$ | $0 \times 2$ | $1 \times 1$ | $1 \times 4$ | $1 \times 2$ | $1 \times 1$ |
| **Hasil tambah** | $0 + 2 + 0 = 2$ | | | $4 + 0 + 1 = 0$ | | | $0 + 0 + 1 = 1$ | | | $4 + 2 + 1 = 7$ | | |
| **Nombor perlapanan** | 2 | | | 5 | | | 1 | | | 7 | | |

LIVEWORKSHEETS