

RATU NAVULA COLLEGE**YEAR 12 MATHEMATICS - WORKSHEET 2****STRAND 1: BASIC MATHEMATICS****FY12CE 2018**

- When simplified $(4^3)^2$ is equal to
 - 4^5
 - 4^6
 - 4^9
 - 4^{32}
- The expression $\log 10 - \log 5$ can be simplified to
 - $\log 2$
 - $\log 5$
 - $\log 15$
 - $\log 50$
- $2 + 3$ in modulo 4 is equal to
 - 0
 - 1
 - 2
 - 3
- Sally purchased a laptop on hire purchase.



She paid \$100 deposit and 24 monthly payments of \$30. Calculate the total amount she paid for the laptop.

- Simplify $\frac{6}{\sqrt{7}+1}$ by rationalizing the denominator.
- Simplify $\frac{25^{x-1}}{5^x}$
- Show that the operation table for the set $\{0, 1, 2\}$ and the operation $*$ represents a group.

| * | 0 | 1 | 2 |
|---|---|---|---|
| 0 | 0 | 1 | 2 |
| 1 | 1 | 2 | 0 |
| 2 | 2 | 0 | 1 |