

S3E-14A | Revision on Indices and Numeral Systems (I)

1. (a) 8
(b) 48
(c) 64
(d) $\frac{1}{30}$

2. 3^{4x+13}

3. $x = -3, y = 1$

4. (a) $-\frac{64}{a^6}$
(b) $4a^{10}b^6$
(c) $\frac{27x^{12}}{64y^{15}}$

5. (a) 8×10^8
(b) 2.835×10^{12}
(c) 8.93×10^{-4}

6. (a) $2 \times 10^4 + 4 \times 10^3 + 0 \times 10^2 + 6 \times 10^1 + 3 \times 10^0$
(b) $7 \times 16^3 + 14 \times 16^2 + 0 \times 16^1 + 12 \times 16^0$
(c) $1 \times 2^4 + 0 \times 2^3 + 0 \times 2^2 + 1 \times 2^1 + 1 \times 2^0$

7. (a) 37_{10}
(b) 8466_{10}
(c) 46_{10}
(d) 9197_{10}

8. (a) 23_{16}
(b) 200_{16}
(c) 932_{16}
(d) $1ADBC_{16}$

9. 1.09×10^2

M.C.

1. D
2. C
3. B
4. A