

1.

$$32^{\frac{1}{5}}$$

- ☐ A 4
☐ B 3
☐ C 2
☐ D 1

2.

$$\left(-\frac{2}{3}\right)^3 =$$

- ☐ A $-\frac{4}{9}$
☐ B $-\frac{8}{27}$
☐ C $\frac{4}{9}$
☐ D $\frac{8}{27}$

3.

Simplify:
Permudahkan:

$$\frac{6x^5y^4z^7}{2x^6y^{-1}}$$

- ☐ A $6x^5y^4z^7$
☐ B $\frac{2x^5y^7}{x}$
☐ C $\frac{3y^5z^7}{x}$
☐ D $\frac{4y^4z^7}{x}$

4.

Simplify:
Permudahkan:

$$(m^3)^4$$

- ☐ A m
☐ B m^3
☐ C m^7
☐ D m^{12}

5.

Simplify.
Permudahkan.

$$30x^8y^4 \div 5y^2 \div 3x^5y$$

- ☐ A $2x^3y$
☐ B $15x^3y$
☐ C $2x^2y^2$
☐ D $15x^2y^2$

6. Simplify:
Permudahkan:

$$(mn^3)^2 \times n^{-3}$$

- ☐ A mn
☐ B mn^3
☐ C m^2n^3
☐ D m^4n

7. Which of the following is **not** true?
Antara berikut, yang manakah **tidak** benar?

- ☐ A $k^6 \times k^4 \times k^0 = k^{10}$
☐ B $5^{\frac{2}{3}} = \sqrt[3]{25}$
☐ C $2^{15} \div 2^3 = 2^5$
☐ D $(x^8)^{-\frac{1}{4}} = x^{-2}$

8. $(2^{\frac{1}{4}})^{-2} \times (2^2)^{\frac{3}{4}} =$

- ☐ A -1
☐ B 0
☐ C 2
☐ D 4

9. Simplify.
Permudahkan.

$$\frac{4}{9}m^7 \times 18m^5$$

- ☐ A $6m^{35}$
☐ B $8m^{35}$
☐ C $6m^{12}$
☐ D $8m^{12}$

10. Given $\left(\frac{2}{3}\right)^n = \frac{81}{16}$, find the value of n .

Diberi $\left(\frac{2}{3}\right)^n = \frac{81}{16}$, cari nilai n .

- ☐ A -4
☐ B -2
☐ C 3
☐ D 4

11. $5^{12} \div 5^9 \div 5^3 =$

- ☐ A 5
- ☐ B 3
- ☐ C 1
- ☐ D 0

12. Calculate the value of the following by using a calculator.
Hitung nilai yang berikut dengan menggunakan kalkulator.

$(1.2)^3 =$

- ☐ A -0.678
- ☐ B -1.728
- ☐ C 0.678
- ☐ D 1.728

13. Simplify:
Permudahkan:

$$\frac{8h^5k^2 \times 6k^3}{3h^2}$$

- ☐ A $\frac{16k^5}{h^3}$
- ☐ B $\frac{24k^5}{h^3}$
- ☐ C $16h^3k^5$
- ☐ D $24h^3k^5$

14. Which of the following gives k^6 ?
Antara berikut, yang manakah memberi k^6 ?

- ☐ A $k^2 \times k^3$
- ☐ B $k^{2(3)}$
- ☐ C $k^{11} \times k^{-4}$
- ☐ D $\frac{k^2}{k^4}$

15. $7^2 \times 7^4 =$

- ☐ A 6^8
- ☐ B 6^7
- ☐ C 7^8
- ☐ D 7^6

16. Calculate the value of the following.
Hitung nilai bagi yang berikut.

$$8^3$$

- ☐ A 24
☐ B 64
☐ C 185
☐ D 512

17. Write the following number in index form using the base given.
Tulis nombor yang berikut dalam bentuk indeks dengan menggunakan asas yang diberikan.

$$243 \quad [\text{Base/Asas } 3]$$

- ☐ A 5^3
☐ B 7^3
☐ C 3^5
☐ D 3^6

18. $16^{\frac{3}{4}} \times 3^{-1} =$

- ☐ A -2
☐ B $\frac{8}{3}$
☐ C $\frac{16}{3}$
☐ D 48

19. Simplify.
Permudahkan.

$$\frac{(6xy^3)^3 \times (4x^5y^7)^2}{36x^8y^{15}}$$

- ☐ A $96x^5y^8$
☐ B $48x^5y^8$
☐ C $96x^9y^{12}$
☐ D $48x^9y^{12}$

20. Simplify:
Permudahkan:

$$\frac{-18m^3n^6}{6(m^2n)^2}$$

- ☐ A $-3mn^2$
☐ B $-3mn^4$
☐ C $\frac{-3n^4}{m}$
☐ D $\frac{-3m}{n^4}$