

Type 1: Basic

Question 1 [S4/1343E93/II/1]

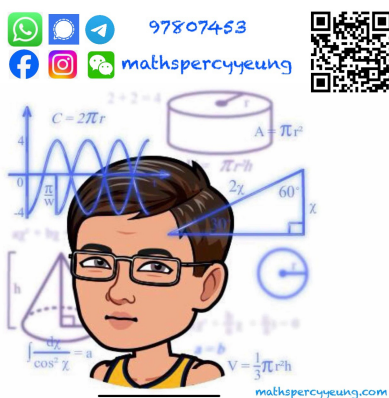
$$a^2 \times (3a + a) =$$

- A. $5a^2$.
- B. $4a^3$.
- C. $3a^4$.
- D. $4a^4$.

Question 2 [S5/1343EFC/II/2]

$$\frac{(-3y^2)^5}{-9y} =$$

- A. $-y^5$.
- B. $-3y^5$.
- C. y^5 .
- D. $3y^5$.



Question 3 [DSE/2012/II/1]

$$\frac{(2x^4)^3}{2x^5} =$$

- A. $3x^2$.
- B. $3x^7$.
- C. $4x^7$.
- D. $4x^{59}$.

Question 4 [DSE/2015/II/2]

$$\frac{(3y^6)^4}{3y^2} =$$

- A. $4y^5$.
- B. $4y^8$.
- C. $27y^{12}$.
- D. $27y^{22}$.

Type 2: With relatively Large Numbers

Question 5 [S6/1346233/II/1]

$$6^{888} \times 4^{222} =$$

- A. 24^{222} .
- B. 24^{444} .
- C. 72^{222} .
- D. 72^{444} .

Question 6 [S4/1343EF7/II/1]

$$\left(\frac{2^{888}}{4^{333}}\right) 8^{111} =$$

- A. 2^{333} .
- B. 2^{444} .
- C. 2^{555} .
- D. 2^{666} .

Question 7 [S5/538970385/II/1]

$$(-3)^{8865} \left(\frac{1}{3}\right)^{8866} =$$

- A. $-\frac{1}{3}$.
- B. $\frac{1}{3}$.
- C. 3 .
- D. -3 .

Question 8 [DSE/2016/II/1]

$$8^{222} \cdot 5^{666} =$$

- A. 10^{666} .
- B. 10^{888} .
- C. 40^{666} .
- D. 40^{888} .

Type 3: With unknown Indices

Question 9 [S4/13461BB/II/1]
 $2^x \cdot 8^y =$

- A. 2^{x+3y} ,
- B. 2^{3xy} ,
- C. 16^{x+y}
- D. 16^{xy} ,

Question 10 [S4/1343DC8/II/1]

$$\frac{(2^{n+1})^2}{4} =$$

- A. 2^n ,
- B. 2^{n+1}
- C. 2^{2n} ,
- D. 2^{2n+1} ,

Question 11 [S6/1343EA5/II/1]

$$\left(\frac{8^{n+1}}{4^n}\right)^2 =$$

- A. 2^{2n+2} ,
- B. 2^{2n+6} ,
- C. 2^{10n+2} ,
- D. 2^{10n+6} ,

Question 12 [S4/1346283/II/2]
 $(9^{n+1} \times 27)^2 =$

- A. 3^{4n+2} ,
- B. 3^{4n+4} ,
- C. 3^{6n} ,
- D. 3^{6n+4}

Question 13 [S4/13463AC/II/2]
 $\frac{3^{2n} \times 9^{3n}}{81^n} =$

- A. 9^{n+1}
- B. 9^{-2n}
- C. 9^{2n}
- D. 9^{4n} ,

Question 14 [DSE/2013/II/1]
 $(27 \cdot 9^{n+1})^3 =$

- A. 3^{6n+12}
- B. 3^{6n+15} ,
- C. 3^{9n+12} ,
- D. 3^{9n+18} ,

Question 15 [DSE/2018/II/1]

$$\frac{8^{2n+1}}{4^{3n+1}} =$$

- A. 1,
- B. 2,
- C. 2^n ,
- D. 2^{-n} ,

Question 16 [DSE/2021/II/1]

$$\frac{(2^n)(8^{3n})}{64^n} =$$

- A. 4^n ,
- B. 4^{2n} ,
- C. 4^{-3n} ,
- D. 4^{-4n} ,