



Powers Check - set samples - paper 1

For each question, identify which option is NOT equal to the expression shown.

1. $9^3 \times 8$ is not equal to:

A. $2^3 \times 3^7$

B. $2^2 \times 3 \times 3^2 \times 3^2 \times 2 \times 3$

C. $6 \times 12 \times 3^4$

D. $4 \times 9^3 \times 2$

E. $3^6 \times 2^3$

ans _____

2. $3 \times 8 \times 9 \times 9$ is not equal to:

A. $3^4 \times 3 \times 2^2 \times 2$

B. $4 \times 9^2 \times 2 \times 3$

C. $6 \times 12 \times 3^3$

D. $2^3 \times 3^4$

E. $3^4 \times 3 \times 2^3$

ans _____

3. $2^2 \times 9 \times 4^2$ is not equal to:

A. $4^3 \times 9$

B. $2^6 \times 3$

C. $3^2 \times 2^4 \times 2^2$

D. $2^2 \times 2 \times 2^3 \times 3^2$

E. $2^2 \times 2^3 \times 2 \times 3 \times 3$

ans _____



Powers Check - set samples - Answers

1. Original Expression: $9^3 \times 8$
Simplified Form: $2^3 \times 3^6$

A: $2^3 \times 3^7 = 2^3 \times 3^7 \leftarrow$ different

B: $2^2 \times 3 \times 3^2 \times 3^2 \times 2 \times 3 = 2^3 \times 3^6$

C: $6 \times 12 \times 3^4 = 2^3 \times 3^6$

D: $4 \times 9^3 \times 2 = 2^3 \times 3^6$

E: $3^6 \times 2^3 = 2^3 \times 3^6$

Answer: A

2. Original Expression: $3 \times 8 \times 9 \times 9$
Simplified Form: $2^3 \times 3^5$

A: $3^4 \times 3 \times 2^2 \times 2 = 2^3 \times 3^5$

B: $4 \times 9^2 \times 2 \times 3 = 2^3 \times 3^5$

C: $6 \times 12 \times 3^3 = 2^3 \times 3^5$

D: $2^3 \times 3^4 = 2^3 \times 3^4 \leftarrow$ different

E: $3^4 \times 3 \times 2^3 = 2^3 \times 3^5$

Answer: D

3. Original Expression: $2^2 \times 9 \times 4^2$
Simplified Form: $2^6 \times 3^2$

A: $4^3 \times 9 = 2^6 \times 3^2$

B: $2^6 \times 3 = 2^6 \times 3 \leftarrow$ different

C: $3^2 \times 2^4 \times 2^2 = 2^6 \times 3^2$

D: $2^2 \times 2 \times 2^3 \times 3^2 = 2^6 \times 3^2$

E: $2^2 \times 2^3 \times 2 \times 3 \times 3 = 2^6 \times 3^2$

Answer: B