

## CA Grade 7 Standard 7.NS.2.3

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### MULTIPLE CHOICE

1.  $\frac{3^3 \cdot 5^4 \cdot 7^8}{3^4 \cdot 5^3 \cdot 7^8} =$

A.  $\frac{7}{15}$

B.  $\frac{3}{5}$

C.  $\frac{5}{7}$

D.  $\frac{5}{3}$

2.  $11^8 \cdot 11^3 =$

A.  $11^5$

B.  $11^{11}$

C.  $11^{24}$

D.  $121^{11}$

3. Which expression below has a product of 285,768?

A.  $2^3 \cdot 7^2 \cdot 9^3$

B.  $2^2 \cdot 7^2 \cdot 9^3$

C.  $6^3 \cdot 49^2 \cdot 81^2$

D.  $2^2 \cdot 7^2 \cdot 9^2$

4.  $\frac{12^3 \cdot 5^6}{12^3 \cdot 5^7} =$

A.  $\frac{1}{12}$

B.  $\frac{1}{5}$

C. 1

D.  $\frac{12}{5}$

5. When multiplying powers with like bases, what operation should you perform on the exponents?

A. addition

B. subtraction

C. multiplication

D. division

6.  $\frac{3^4 \cdot 9^6 \cdot 6^7}{3^3 \cdot 9^6 \cdot 6^8} =$

A.  $\frac{1}{6}$

B.  $\frac{1}{2}$

C.  $\frac{2}{3}$

D. 2

7. Which expression below has the same product as  $2^4 \cdot 7^3 \cdot 2 \cdot 25^5 \cdot 7^2$ ?

A.  $2^4 \cdot 5^7 \cdot 7^5$

B.  $2^5 \cdot 5^{10} \cdot 7^5$

C.  $2^5 \cdot 5^{10} \cdot 7^6$

D.  $2^5 \cdot 5^5 \cdot 7^5$

8.  $\frac{12^9}{12^{10}} =$

A.  $12^{19}$

B. 12

C. 1

D.  $\frac{1}{12}$

9. When dividing powers with like bases, what should you do with the exponents?

A. add

B. subtract

C. multiply

D. divide

10.  $\frac{6^{10} \cdot 3^2}{6^9} =$

A. 6

B. 9

C. 18

D. 54