Objective #11

Prime factorization **(Page 2 of 2)**

3. Determine the prime factorization of 2520.

[A] $2^3 \cdot 3^3 \cdot 5 \cdot 11$ [B] $2^3 \cdot 3^2 \cdot 5 \cdot 7$

[C] $2^4 \cdot 3^2 \cdot 5^2 \cdot 7$ [D] $2^2 \cdot 3^2 \cdot 5^2 \cdot 10 \cdot 11$

2|2520
2|1260
2|630
3|315
3|105
5|35
7

$= 2^3 \cdot 3^2 \cdot 5 \cdot 7$

4. Write the prime factorization of 3168.

[A] $2^5 \cdot 3^2 \cdot 13$ [B] $2^2 \cdot 3^5 \cdot 13$ [C] $2^5 \cdot 3^2 \cdot 11$ [D] $2^2 \cdot 3^5 \cdot 11$

2|3168
2|1584
2|792
2|396
2|198
3|99
3|33
11

$= 2^5 \cdot 3^2 \cdot 11$