

# Math 1303 - Math in the Liberal Arts

Quiz #1 - 2008.01.18

Solutions

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1. Compute the prime factorization of 252.

$$252 = 2^2 \cdot 3^2 \cdot 7$$

2. Compute the prime factorization of 360.

$$360 = 2^3 \cdot 3^2 \cdot 5$$

3. Compute the LCM of 252 and 360. You may leave your answer in prime factorization form if you wish.

$$\text{LCM}(252, 360) = 2^3 \cdot 3^2 \cdot 5 \cdot 7 = 2520$$

4. Compute the GCD of 252 and 360. You may leave your answer in prime factorization form if you wish.

$$\text{GCD}(252, 360) = 2^2 \cdot 3^2 = 36$$