MATH 221: BASIC CONCEPTS OF ELEMENTARY MATHEMATICS I

Quiz #11

Points: Each problem is worth 4 points.

1. What is the least number divisible by each natural number less than or equal to 15?

    (a) $2^7 \cdot 3^5 \cdot 5^3 \cdot 7^2 \cdot 11 \cdot 13$ (b) $2^4 \cdot 3^3 \cdot 5 \cdot 7 \cdot 11 \cdot 13$

    (c) $2^4 \cdot 3^2 \cdot 5 \cdot 7 \cdot 11 \cdot 13$ (d) $2^3 \cdot 3^2 \cdot 5 \cdot 7 \cdot 11 \cdot 13$

2. What is the value of $\mathrm{GCD}\left(2^5 \cdot 3^3 \cdot 5^3 \cdot 7,\, 2 \cdot 3^2 \cdot 5 \cdot 11\right)$?

    (a) $2 \cdot 3^2 \cdot 5$ (b) $2 \cdot 3^2 \cdot 5 \cdot 7 \cdot 11$

    (c) $2^5 \cdot 3^3 \cdot 5^3$ (d) $2^5 \cdot 3^3 \cdot 5^3 \cdot 7 \cdot 11$