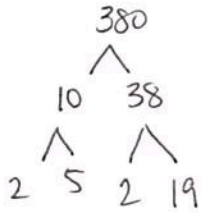
MT 118, Quiz #6, Fall 2019 Name KEY

Instructions: Show all work. Partial credit can only be given where work is shown. Be sure to answer all parts of each question. You may not use a calculator on this quiz.

1. Find a factor tree for 380.

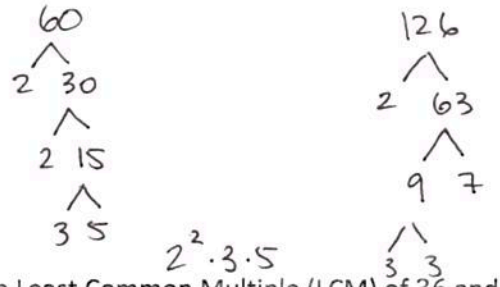


prime factors: $2^2 \cdot 5 \cdot 19$

2. If 24 divides a number b, what else must divide b? List all possible divisors.

1, 2, 3, 4, 6, 8, 12

3. Find the Greatest Common Factor (GCF) of 60 and 126.

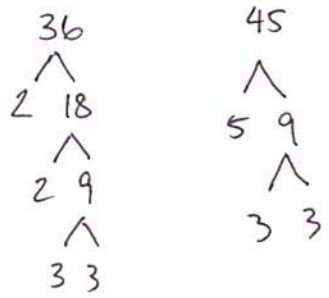


$2^2 \cdot 3 \cdot 5$ $2 \cdot 3^2 \cdot 7$

2, 3 are common

GCF = 6

4. Find the Least Common Multiple (LCM) of 36 and 45.



$2^2 \cdot 3^2$ $3^2 \cdot 5$

$2^2 \cdot 3^2 \cdot 5 = 4 \cdot 9 \cdot 5 =$

$36 \cdot 5 = 180$

= LCM