

Outline notes for PS02
Math 126

Definitions. (Ch. 5) Common multiple, least common multiple. (Ch. 7) Composite.

Problem outlines.

5.4 (a,b) Try examples, find pattern.

(c) Prove the pattern you find in parts (a) and (b).

(d) Apply the formula, using the Euclidean Algorithm.

6.1(b) Apply the Euclidean Algorithm. (Just so you know, this is the correct name for “the process described on pages 36–38.”)

6.4 (a) Try to do this without guessing, using the material in Ch. 6. One good problem-solving method is to change the given problem into a problem you know how to solve, and then boost those methods to solve the current problem. Note that while $\gcd(6, 15, 20) = 1$, $\gcd(6, 15) \neq 1$, $\gcd(15, 20) \neq 1$, and $\gcd(6, 20) \neq 1$.

(b,c) Generalize your method in (a); apply the method from part (b).

One thing you should *not* do in 6.4 is to apply the Linear Equation Theorem/the Euclidean Algorithm directly, as the theorem and the algorithm only apply to the situation where you have two numbers and not three.