

Solutions to Exercise Set #1
CS 1213, Fall 2018

1. $A = \begin{matrix} 51 & 187 & 51 & 136 & 51 & 85 & 51 & 34 & 17 \\ B = 187 & 51 & 136 & 51 & 85 & 51 & 34 & 17 & 17 \\ D = 136 & 85 & 34 & 17 & 17 \end{matrix}$

The GCD is 17.

2. $A = \begin{matrix} 42 & 14 & 28 & 14 \\ B = 14 & 28 & 14 & 14 \\ D = 28 & 14 \end{matrix}$

The GCD is 14.

3. $A = \begin{matrix} 35 & 27 & 19 & 11 & 3 \\ B = 8 \\ \text{counter} = \begin{matrix} 0 & 1 & 2 & 3 & 4 \end{matrix} \end{matrix}$

The quotient is 4.

4. $A = \begin{matrix} 42 & 28 & 14 & 0 \\ B = 14 \\ \text{counter} = \begin{matrix} 0 & 1 & 2 & 3 \end{matrix} \end{matrix}$

The quotient is 3.

5. $A = \begin{matrix} 5 \\ B = 4 \\ \text{counter} = \begin{matrix} 0 & 1 & 2 & 3 & 4 \\ \text{total} = \begin{matrix} 0 & 5 & 10 & 15 & 20 \end{matrix} \end{matrix}$

The product is 20.

6. A = 2
B = 6
counter = 0 1 2 3 4 5 6
total = 0 2 4 6 8 10 12

The product is 12.