

Due by Tuesday, September 24, 2024, 3:25 pm.

Please select **eight** of the following exercises and provide solutions.

From the textbook's exercises:

1). 2.22

2). 2.27

3). 4.16

4). 4.24

5). 4.26

6). 4.30

7). 4.38

8). 4.42

9). For any integer n , please prove:

$$6 \mid n(n+1)(n+2)$$

10). For any positive integers a and b , please prove:

$$ab = \gcd(a, b) \cdot \text{lcm}(a, b)$$