

- 7.1 (a) True.
(b) False.
(c) False.
(d) True.
(e) True.
(f) True.

- 7.2 (a) False.
(b) True.
(c) True.
(d) True.
(e) False.
(f) False.

7.3 Following Euclids algorithm:

- (a) Yes.

$$\begin{aligned} &GCD(10505, 1274) \\ &= GCD(1274, 313) \\ &= GCD(313, 22) \\ &= GCD(22, 5) \\ &= GCD(5, 2) \\ &= GCD(2, 1) \\ &= GCD(1, 1) \\ &= 1 \end{aligned}$$

- (b) No.

$$\begin{aligned} &GCD(8024, 7289) \\ &= GCD(7289, 740) \\ &= GCD(740, 629) \\ &= GCD(629, 111) \\ &= GCD(111, 74) \\ &= GCD(74, 37) \\ &= 37. \end{aligned}$$