



1. $\gcd(24, 54)$

Ans) $54 = 24 \times 2 + 6$

$24 = 6 \times 4 + 0$

$\therefore \gcd(24, 54) = 6$

2. $\gcd(18, 42)$

Ans) $42 = 18 \times 2 + 6$

$18 = 6 \times 3 + 0$

$\therefore \gcd(18, 42) = 6$

3. $\gcd(244, 354)$

Ans) $354 = 244 \times 1 + 110$

$244 = 110 \times 2 + 24$

$110 = 24 \times 4 + 14$

$24 = 14 \times 1 + 10$

$14 = 10 \times 1 + 4$

$10 = 4 \times 2 + 2$

$4 = 2 \times 2 + 0$

$\therefore \gcd(244, 354) = 2$

4. $\gcd(128, 423)$

Ans) $423 = 128 \times 3 + 39$

$128 = 39 \times 3 + 11$

$39 = 11 \times 3 + 6$

$11 = 6 \times 1 + 5$

$6 = 5 \times 1 + 1$

$5 = 1 \times 5 + 0$

$\therefore \gcd(128, 423) = 1$

5. $\gcd(2415, 3289)$

Ans) $3289 = 2415 \times 1 + 874$

$2415 = 874 \times 2 + 667$

$874 = 667 \times 1 + 117$

$667 = 117 \times 5 + 82$

$117 = 82 \times 1 + 35$

$82 = 35 \times 2 + 12$

$35 = 12 \times 2 + 11$

$12 = 11 \times 1 + 1$

$11 = 1 \times 11 + 0$

$\therefore \gcd(2415, 3289) = 1$



6. $\gcd(4278, 8602)$

Ans)

$$8602 = 4278 \times 2 + 46$$

$$4278 = 46 \times 93 + 0$$

$$\therefore \gcd(4278, 8602) = 46$$

7. $\gcd(406, 555)$

Ans)

$$555 = 406 \times 1 + 49$$

$$406 = 49 \times 8 + 14$$

$$49 = 14 \times 3 + 7$$

$$14 = 7 \times 2 + 0$$

$$\therefore \gcd(406, 555) = 7$$

8. $\gcd(23, 0)$

Ans)

$$23 = 0 \times 1 + 23$$

$$0 = 23 \times 0 + 0$$

$$\therefore \gcd(23, 0) = 23$$

9. $\gcd(4200, 3780, 3528)$

Ans)

$$\gcd(4200, 3780) \rightarrow$$

$$4200 = 3780 \times 1 + 420$$

$$3780 = 420 \times 9 + 0$$

$$\therefore \gcd(4200, 3780) = 420$$

$$\gcd(420, 3528) \rightarrow$$

$$3528 = 420 \times 8 + 168$$

$$420 = 168 \times 2 + 84$$

$$168 = 84 \times 2 + 0$$

$$\therefore \gcd(4200, 3780, 3528) = 84$$