

1. For each of the following use the division theorem to specify the quotient and the remainder when:

- (a). 417 is divided by 34
- (b). 1052 is divided by 29
- (c). 2691 is divided by 317
- (d). 69810 is divided by 12003456
- (e). 345 is divided by 5
- (f). 36 is divided by 8

2. find the unique factorisation of each of the following:

- (a). 135
- (b). 1330
- (c). 3105
- (d). 211

3. Using “brute force”, i.e., by listing factors, find the GCD of

- (a). 60 and 84
- (b). 98 and 56

4. Find the LCM of

- (a). 60 and 84
- (b). 98 and 56
- (c). 816 and 612

5. Using Euclid’s algorithm, find the GCD of

- (a). 60 and 84
- (b). 98 and 56
- (c). 816 and 612
- (d). 28731 and 9811
- (e). 30298 and 16726
- (f). 2064499 and 238067

6. Which of the following pairs of numbers are coprime?

- (a). 75 and 86
- (b). 1529 and 14039
- (c). 1001 and 1331
- (d). 639531 and 113161