

## 1.2 Applying algebraic skills to number theory

- Using Euclid's algorithm to find the greatest common divisor of two positive integers

1. Use the Euclidean algorithm to find the greatest common divisor of:

- (a) 231 and 17            (b) 149 and 139            (c) 280 and 117            (d) 132 and 424  
(e) 140 and 252            (f) 1365 and 770            (g) 1696 and 1504            (h) 2093 and 1679

### Answers:

- 1    (a)  $\text{GCD} = 1$             (b)  $\text{GCD} = 1$             (c)  $\text{GCD} = 1$             (d)  $\text{GCD} = 4$   
      (e)  $\text{GCD} = 28$             (f)  $\text{GCD} = 37$             (g)  $\text{GCD} = 32$             (h)  $\text{GCD} = 23$