

### Accumulative test

### 1

### on lesson 1 – unit 1

#### 1 Choose the correct answer from the given ones :

- 1 If the expression :  $x^2 + kx + 2$  can be factorized , then  $k = \dots\dots\dots$
- (a) - 2                      (b) 2                      (c) 5                      (d) 3
- 2 The expression :  $x^2 + 4x + k$  can be factorized if  $k = \dots\dots\dots$
- (a) 5                      (b) 6                      (c) 2                      (d) 3
- 3 If the expression :  $x^2 - cx + 12$  can be factorized , then  $c$  may be equal to  $\dots\dots\dots$
- (a) - 1                      (b) 4                      (c) 7                      (d) 10
- 4 If  $x^2 + kx - 6 = (x + 3)(x - 2)$  , then  $k = \dots\dots\dots$
- (a) - 1                      (b) 1                      (c) 2                      (d) 3

#### 2 Complete each of the following :

- 1 If  $(x - 1)$  is a factor of the expression :  $x^2 - 5x + 4$  , then the other factor is  $\dots\dots\dots$
- 2 If  $(x - 3)$  is a factor of the expression :  $x^2 - 4x + 3$  , then the other factor is  $\dots\dots\dots$
- 3 The expression :  $x^2 + 2x + k$  can be factorized , when  $k = \dots\dots\dots$
- 4 If  $x + 3$  is a factor of the expression :  $x^2 + x - 6$  , then the other factor is  $\dots\dots\dots$

#### 3 Factorize each of the following completely :

- 1  $x^2 - 5x - 36$                       2  $x^2 + 2x - 35$
- 3  $x^2 + 4x - 21$                       4  $x^2 + 8x + 12$
- 5  $3x^2 - 15x + 12$                       6  $(c + d)^2 + 5(c + d) + 6$