

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 $(c + d)^2 + 5(c + d) + 6$ |