

## FACTORISING – PRACTICE QUESTIONS



1.

Factorise fully:

(a)  $10x + 8$

(b)  $4x + 6$

(c)  $15x + 25$

(d)  $9x - 12$

(e)  $20x + 70$

(f)  $33x - 55$

(g)  $12x - 20$

(h)  $18x + 30$

(i)  $40x + 16$

(j)  $20x - 35$

(k)  $27x + 36$

2.

Factorise fully:

(a)  $12x^2 + 14x$

(b)  $40x^2 - 50x$

(c)  $8x^2 + 12x$

(d)  $15x^2 - 24x$

(e)  $6x^2 + 10x$

(f)  $14x^2 + 21x$

(g)  $8x^2 - 24x$

(h)  $44x^2 - 33x$

(i)  $30x^2 - 36x$

(j)  $18x^2 - 45x$

(k)  $32x^2 + 24x$

3.

Factorise fully:

(a)  $20x - 18$

(b)  $30x^2 + 50x$

(c)  $18x + 15$

(d)  $24x + 28$

(e)  $18x^2 - 27x$

(f)  $16x + 30$

(g)  $24x - 9x^2$

(h)  $14x^2 + 35x$

(i)  $32x^2 + 44x$

(j)  $77 - 55x$

(k)  $45x + 60$

4.

Factorise fully:

(a)  $x^2 + 2x$

(b)  $x^2 - 10x$

(c)  $x^2 + 12x$

(d)  $x^2 - 8x$

(e)  $x^2 - 20x$

(f)  $x^2 + 5x$

(g)  $x^2 + 25x$

(h)  $4x^2 - 5x$

(i)  $16x^2 + 9x$

(j)  $x^2 - 7x$

(k)  $9x^2 + x$

5.

Factorise fully:

(a)  $6x + 16$

(b)  $x^2 - 11x$

(c)  $7x - 21$

(d)  $18x^2 + 30x$

(e)  $20x^2 - 60x$

(f)  $5x - x^2$

(g)  $25x - 35$

(h)  $8 - 2x$

(i)  $15x^2 + 27x$

(j)  $x^2 + x$

(k)  $16x + 24$

(l)  $28x - 36x^2$

(m)  $19x + 10x^2$

(n)  $x^2 - 30x$

(o)  $20x + 28$

(p)  $54 - 45x$

(q)  $16x^2 + 40x$

(r)  $24x + 36$

(s)  $4x^2 - 16x$

(t)  $41x - x^2$

(u)  $8x + 36$

(v)  $21x^2 + 6x$

(w)  $48x + 60$

(x)  $200x^2 + 350x$

6.

Factorise:

(a)  $x^2 + 6x + 5$

(b)  $x^2 + 6x + 8$

(c)  $x^2 + 7x + 10$

(d)  $x^2 + 7x + 12$

(e)  $x^2 + 8x + 15$

(f)  $x^2 + 9x + 20$

(g)  $x^2 + 15x + 14$

(h)  $x^2 + 6x + 9$

(i)  $x^2 + 11x + 24$

(j)  $x^2 + 9x + 18$

(k)  $x^2 + 13x + 40$

(l)  $x^2 + 12x + 36$

7.

Factorise:

(a)  $x^2 + 2x - 8$

(b)  $x^2 - 4x - 5$

(c)  $x^2 + 14x - 15$

(d)  $x^2 - 4x - 12$

(e)  $x^2 - 5x - 14$

(f)  $x^2 + 6x - 16$

(g)  $x^2 - x - 20$

(h)  $x^2 + 7x - 30$

(i)  $x^2 + x - 12$

(j)  $x^2 - 10x + 25$

(k)  $x^2 - 14x + 24$

(l)  $x^2 - 15x + 36$

8.

Factorise fully:

(a)  $10x + 18$

(b)  $x^2 + 12x + 20$

(c)  $x^2 + 26x$

(d)  $x^2 + 7x - 8$

(e)  $16x^2 + 28x$

(f)  $25x - 55x^2$

(g)  $x^2 - 7x - 18$

(h)  $7x^2 + 11x$

(i)  $x^2 + 12x + 32$

(j)  $x^2 - 10x + 24$

(k)  $40x - x^2$

(l)  $25x^2 + 100x$

9.

Factorise fully:

(a)  $x^2 + 18x$

(b)  $y^2 + 10y + 21$

(c)  $44z - 33$

(d)  $27w^2 + 45w$

(e)  $t^2 - 11t - 12$

(f)  $m^2 + 15m + 50$

(g)  $20 - 28a$

(h)  $12d - d^2$

(i)  $c^2 + 3c - 18$

(j)  $36p^2 + 60p$

(k)  $j^2 - 15j - 16$

(l)  $k^2 - 14k + 49$

10.

Factorise fully:

(a)  $9ab - 3a$

(b)  $5c + 7cd$

(c)  $18e^2 + 20ef$

(d)  $30gh - 50gh^2$

(e)  $21k - 28jk$

(f)  $33mn + 44m^2$

(g)  $12p^2q - 24pq$

(h)  $11rs^2 + 10r^2s$

(i)  $20t^2 + 45tu^2$

(j)  $81w^2 - 90vw^2$

(k)  $28x^2y + 49xy^2$

(l)  $8yz - 18z^2$

(m)  $7ab^2 + ab$

(n)  $24mp^2 - 30m^2p$

(o)  $k^2 - 10ak^2$

(p)  $10bx + 16x^2$