

Exercise 1

Factorise the following expressions:

1. $6x + 3$
2. $16x - 8$
3. $7x^2 - 21x$
4. $36x^3 - 12x$
5. $24x^2 - 8x$
6. $9yx^2 - 3xy$
7. $6x^2y^3 + 12xy + 6xy^2$
8. $18x^3yz^2 + 9xy^2z - 27xyz^2$

Exercise 2

Factorise the following expressions:

1. $5x + 15$
2. $12x - 2$
3. $6x^2 - 18x$
4. $60x^2 - 12x$
5. $15x^2 - 5x$
6. $7xy^3 + 56xy$
7. $13x^2y^2 + 26xy + 13x^2y$
8. $15x^2yz^3 + 5xy^2z - 25xyz$

Exercise 3

Factorise the following expressions:

1. $10x + 10$
2. $14x - 2$
3. $6x^2 - 24x$
4. $50x^2 - 25x$
5. $120x^2 + 12x$
6. $6y^2 - 2xy - 2y$
7. $44x^3y^3 + 4xy^2$
8. $16x^3yz^2 - 2xy^2z - 48xyz^2$

Exercise 4

Factorise the following expressions:

1. $6x + 3$
2. $20x - 2$
3. $8x^2 - 40x$
4. $32x^2 + 12x$
5. $150x^2 - 20x$
6. $6xy^2 + 4xy$
7. $14x^2y^2 - 7xy$
8. $20x^2yz^2 + 32xy^3z - 12xyz^2$

National 5 Homework Answers

Exercise 1

1. $3(2x + 1)$
2. $8(2x - 1)$
3. $7x(x - 3)$
4. $12x(3x^2 - 1)$
5. $8x(3x - 1)$
6. $3xy(3x - 1)$
7. $6xy(xy^2 + 2 + y)$
8. $9xyz(2x^2z + y - 3z)$

Exercise 2

1. $5(x + 3)$
2. $2(6x - 1)$
3. $6x(x - 3)$
4. $12x(5x - 1)$
5. $5x(3x - 1)$
6. $7xy(y^2 + 8)$
7. $13xy(xy + 2 + x)$
8. $5xyz(3xz^2 + y - 5)$

Exercise 3

1. $10(x + 1)$
2. $2(7x - 1)$
3. $6x(x - 4)$
4. $25x(2x - 1)$
5. $12x(10x + 1)$
6. $2y(3y - x - 1)$
7. $4xy^2(11x^2y + 1)$
8. $2xyz(8x^2z - y - 24z)$

Exercise 4

1. $3(2x + 1)$
2. $2(10x - 1)$
3. $8x(x - 5)$
4. $4x(8x + 3)$
5. $10x(15x - 2)$
6. $2xy(3y + 2)$
7. $7xy(2xy - 1)$
8. $4xyz(5xz + 8y^2 - 3z)$