

**Exercise 1**

Factorise the following expressions:

1.  $x^2 - 25$
2.  $x^2 - 16$
3.  $x^2 - 9$
4.  $2x^2 - 200$
5.  $4x^2 - 16$
6.  $5x^2 - 125$
7.  $6x^2 - 96$
8.  $10x^2 - 1000$

**Exercise 2**

Factorise the following expressions:

1.  $x^2 - 36$
2.  $x^2 - 64$
3.  $x^2 - 81$
4.  $2x^2 - 162$
5.  $2x^2 - 50$
6.  $3x^2 - 27$
7.  $5x^2 - 180$
8.  $8x^2 - 392$

**Exercise 3**

Factorise the following expressions:

1.  $x^2 - 100$
2.  $x^2 - 4$
3.  $x^2 - 121$
4.  $3x^2 - 12$
5.  $4x^2 - 484$
6.  $5x^2 - 45$
7.  $2x^2 - 72$
8.  $128 - 2x^2$

**Exercise 4**

Factorise the following expressions:

1.  $x^2 - 400$
2.  $x^2 - 169$
3.  $3x^2 - 75$
4.  $4x^2 - 144$
5.  $4x^2 - 64$
6.  $5x^2 - 405$
7.  $6x^2 - 600$
8.  $2000 - 5x^2$

National 5 Homework Answers

Exercise 1

1.  $(x + 5)(x - 5)$
2.  $(x + 4)(x - 4)$
3.  $(x + 3)(x - 3)$
4.  $2(x - 10)(x + 10)$
5.  $4(x - 2)(x + 2)$
6.  $5(x - 5)(x + 5)$
7.  $6(x - 4)(x + 4)$
8.  $10(x - 10)(x + 10)$

Exercise 2

1.  $(x - 6)(x + 6)$
2.  $(x - 8)(x + 8)$
3.  $(x - 9)(x + 9)$
4.  $2(x - 9)(x + 9)$
5.  $2(x - 5)(x + 5)$
6.  $3(x - 3)(x + 3)$
7.  $5(x - 6)(x + 6)$
8.  $8(x + 7)(x - 7)$

Exercise 3

1.  $(x + 10)(x - 10)$
2.  $(x + 2)(x - 2)$
3.  $(x + 11)(x - 11)$
4.  $3(x + 2)(x - 2)$
5.  $4(x + 11)(x - 11)$
6.  $5(x + 3)(x - 3)$
7.  $2(x + 6)(x - 6)$
8.  $2(8 + x)(8 - x)$

Exercise 4

1.  $(x + 20)(x - 20)$
2.  $(x + 13)(x - 13)$
3.  $3(x + 5)(x - 5)$
4.  $4(x + 6)(x - 6)$
5.  $4(x + 4)(x - 4)$
6.  $5(x + 9)(x - 9)$
7.  $6(x + 10)(x - 10)$
8.  $5(20 + x)(20 - x)$