

Nelson Maths 9 for the CSF II

Homework and Assessment Sheets

Expanding and factorising

AL 9-6

Name: _____ Class: _____

Due date: _____ Parent's signature: _____

Level 5										Level 6									
/10										/20									

Part A: Level 5

Write a like term for each of the following.

1 $3x^2$ _____

2 $2m^2n$ _____

Simplify each of these expressions.

3 $-2 \times p \times -2 \times p =$ _____

4 $16b \div 2b =$ _____

5 $\frac{-36pqr}{-9mp} =$ _____

6 $2ab - 3a - 2b + a - ab =$ _____

7 $3xy + 4yx - xz + 3yz - xz =$ _____

Expand each of the following expressions.

8 $3(p - 2) =$ _____

9 $-5(2x - 4) =$ _____

10 $-2x(x - 3y) =$ _____

Part B: Level 6

Simplify each of the following algebraic expressions.

1 $3xy \times 4yz \div 6xz =$ _____

2 $6ab \div 2a \div 5a =$ _____

3 $-5x(3 - 2x) =$ _____

4 $x(x + 5) - 5x(3 - 2x) =$ _____
 $=$ _____

5 $2(x + 5) - 3(x - 2) =$ _____
 $=$ _____

6 $-2(3 - 5x) - 5(3y - 1) =$ _____
 $=$ _____

7 $3(x + 4) + 2(x - 1) =$ _____
 $=$ _____

8 $-3(4 - 2x) - 5(y - 4) =$ _____
 $=$ _____

Factorise each of the following.

9 $3x + 21 =$ _____

10 $10ab - 4a =$ _____

11 $4a^2 - 2a =$ _____

12 $3(x + 2) + 5(x + 2) =$ _____

13 $2(y - 3) - z(y - 3) =$ _____

14 $xy(z - 4) - 2(z - 4) =$ _____

15 $2xy + 3x + 2yz + 3z =$ _____
 $=$ _____

16 $15x - 3 + 5x^2 - x =$ _____
 $=$ _____

Factorise and simplify each of the following.

17 $\frac{12x + 4}{2} =$ _____

18 $\frac{3x^2 - 6x}{2x} =$ _____

19 $\frac{4x + 8}{x + 2} =$ _____

20 $\frac{(x + 8)(x - 4)}{x + 8} =$ _____

**P
u
z
z
l
e
r**

What will be the final answer if this sum is continued for ever?

$$1 - \frac{1}{2} + \frac{1}{4} - \frac{1}{8} + \frac{1}{16} + \dots$$

Vocabulary

Write the mathematical meaning of:

Factorise _____

Simplify _____