**Factorising Algebraic Expressions**

### Section A

Copy and complete these identities. Use a rectangle to help you if necessary.

1. 
2. 
3. 
4. 
5. 
6. 
7. 
8. 
9. 

This one can be answered in three different ways…



On a mini-whiteboard:

* Which do you think is the “most complete” factorisation?
* Write an explanation, with your own example, of how best to factorise algebraic expressions.

### Section B

For each of the following, write out three different factorisations and say which is fully factorised.









### Section C Fully factorise the following expressions

1. 
2. 
3. 
4. 
5. 
6. 
7. 
8. 
9. 
10. 
11. 
12. 
13. 
14. 
15. 
16. 
17. 
18. 
19. 

### Section D

Separate worksheet to introduce factorising into two sets of brackets.

### Section E

Copy and complete the following. Check your answers by using a rectangle to expand the brackets.

1. 
2. 
3. 
4. 
5. 
6. 
7. 
8. 
9. 
10. 
11. 
12. 
13. Look for a pattern in your previous 3 answers and generalise.

### Section F

Factorise the following expressions

1. 
2. 
3. What is different about the two previous questions? How do you know which approach to use?
4. 
5. 35
6. Why did I ask the previous question?
7. 
8. Check that you have fully factorized the previous question. Do it again in a different way.
9. Create your own questions like 23 and 25 for other people.

**Factorising Algebraic Expressions – Homework**

### Section A

Factorise the following expressions as fully as possible

1. 
2. 
3. 
4. 
5. 
6. 
7. 
8. 
9. 
10. This expression can be factorised in three different ways



Complete all three possible factorisations and say which one is best.

You must explain why this is best in words.

### Fully factorise the following.

1. 
2. 
3. \*
4. \*
5. \*

### Section B

Copy and complete the following

1. 
2. 
3. 
4. 
5. 
6. 
7. 
8. 
9. 

Bonus Questions

1. 
2. 
3. 
4. 