NAME:

Yr 9 2020 Pre-General Expanding and Factorising Checklist

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| Pre-Test | Teacher resource |  |
| **2A Expanding Algebraic Expressions**  **p. 80 in textbook** | | |
| **2C Expanding Algebraic Expressions**  p. 91 | * Write out the distributive law. * Find 2 different maths sites that have a video tutorial that you can view. * Record the sites and pathway to the video. |  |
| ***Exercise 2C***  *p. 94* | *Exercise 2C Q2-6 efgh Q7-8 abc*  *Q11 ace Q12 abef* |  |
| *EXTENSION: Text pg 94/5* | *Q8 def, Q13,* |  |
| **8A Expanding Binomial Products** | | |
| p. 502 | * Read through and record the Distributive Law (FOIL) Eg (a+b)(a-b) * Revisit the maths sites you found to view a video on expanding Binomials (double brackets)   Or go to You tube: <https://youtu.be/Wc2cgGU2I08> |  |
| ***Exercise 8A***  *p. 504* | *Exercise 8A Q1 all Q2-3 adgj,*  *Q4 all Q8 acegi* |  |
| *Problem Solving pg 505* | *Exercise 8A Q 6 or 7* |  |
| *EXTENSION: Text pg 505* | *Exercise 8A Q 10-11* |  |
| **8B Perfect Squares and the Difference of Perfect Squares p. 506** | | |
| You tube video: <https://youtu.be/ZyvVcRRhDo4> | | |
| p. 507 | * Building Understanding |  |
| *Exercise 8B* | *Q1 all Q3 -6 LHS* |  |
| *Reasoning pg 505* | *Exercise 8B Choose 2 of 8, 9 10 or 11* |  |
| *EXTENSION: Text pg 505* | *Exercise 8B Q 12 as many as you can.* |  |

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| **8C Factorising Algebraic Expressions** | | |
| * You tube Factoring Video: https://youtu.be/3DMFb\_7m6mo | | |
| p. 512 | * Building Understanding |  |
| *Exercise 8C*  *p. 514* | *Q3-4 LHS and RHS*  *Q5 adgj Q6 as many as you can* |  |
| *Reasoning pg 516* | *Exercise 8C Q 11-12* |  |
| *EXTENSION: Text pg 516* | *Exercise 8B Q 13 as many as you can.* |  |
| **8D Factorising the Difference of Perfect Squares** | | |
| pp. 517-8 | * Lesson Starter and Building Understanding |  |
| *p. 519* | *Exercise 8D Q1 all Q2-4 LHS*  *Q5 as many as you can* |  |
| *Problem Solving p. 520* | *Exercise 8D Q 6 - 7* |  |
| **8E Factorising by Grouping** | | |
| You tube video lesson: <https://youtu.be/DBoiHLOdhmw> | | |
| p. 522 | Read through Key Ideas and examples |  |
| *Exercise 8E* | *Q1 all Q2-4 LHS*  *Q5 as many as you can* |  |
| **For students doing Pre- Methods:**  **8F Factorising Quadratic Trinomials** | | |
| * You Tube video lesson : https://youtu.be/\_lSGP8wYKC4 | | |
| p. 527 | * Read Key Ideas and complete Building U/standing |  |
| *Exercise 8F* | *Q1 all Q2-6 LHS* |  |
| *Reasoning p. 529* | *Exercise 8F Q 9-10* |  |
| *EXTENSION: Text pg 529* | *Exercise 8F Q 11 as many as you can.* |  |
| *Text p. 530* | *PROGRESS QUIZ* |  |
| *Revison p. 561* | *Chapter Review Q1-6 all* |  |
| **TEST** |  |  |

**2A & 2C Expansion**

For a single term outside of a bracket, multiply the term by each term inside the bracket.

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Example



Example



Exercise 2C Q2-6 efgh Q7-8 abc

Q11 ace Q12 abef

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# 8A Expanding Two Brackets (binomial expansion)

To expand a pair of brackets, multiply each of the terms in the first bracket with each of the terms in the second bracket.

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Example

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| Exercise 8A Q1 all Q2-3 adgj,  Q4 all Q8 acegi |
| Exercise 8A Q 6 or 7 |

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# 8B Expanding Perfect Squares and Difference of Perfect Squares (DOPS)

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Example



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| Exercise 8B Q1 all  Q3 -6 LHS |
| Exercise 8B Choose 2 of 8, 9 10 or 11 |

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# 8C Factorising Algebraic Expressions

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| Exercise 8C Q3-4 LHS and RHS  Q5 adgj Q6 as many as you can |
| Exercise 8C Q 11-12 |

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# 8D Factorising Using DOPS

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Examples

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| Exercise 8D Q1 all Q2-4 LHS  Q5 as many as you can |
| Exercise 8D Q 6 - 7 |

# 8E Factorising by Grouping

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Use the link to watch a video to improve your understanding

<https://youtu.be/DBoiHLOdhmw>

**factor by grouping polynomials?**

(i) ar + br + at + bt  
  
(ii) x2 - ax - bx + ab  
  
(iii) ab2 - bc2 - ab + c2  
  
(iv) x2 - xz + xy - yz  
  
(v) 6ab - b2 + 12ac - 2bc

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Exercise 8E Q1 all Q2-4 LHS

Q5 as many as you can

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# Pre Methods Students: 8F Factorising Quadratic Trinomials

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Examples



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| Exercise 8F Q1 all Q2-6 LHS |
| Exercise 8F Q 9-10 |
| Exercise 8F Q 11 as many as you can. |

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