UNIT 8 Algebra: Brackets

Overhead Slides

Overhead Slides

- 8.1 Negative Numbers
- 8.2 Expansion of Single Brackets
- 8.3 Linear Equations
- 8.4 Factorisation
- 8.5 Expansion of Two Brackets 1
- 8.6 Expansion of Two Brackets 2

Negative Numbers

OS 8.1

Calculate:

$$1. -6 + 13 =$$

$$2. \quad 4 - 22 =$$

$$3. \quad 4 + (-7) =$$

$$4. -6 + 4 =$$

$$5. -7 + (-2) =$$

6.
$$-9+4$$
 =

$$7. \quad -7 - (-2) =$$

$$8. \quad (-6) \times (-9) =$$

$$9. \quad 6 \times (-9) =$$

10.
$$(-48) \div 6 =$$

OS 8.2

1. Expand 4(x + 2) using a table:

×	х	2
4		

So
$$4(x+2) =$$

2. Expand 3(x-5) using a table:

×	

So
$$3(x-5) =$$

3. Expand without using a table:

- (a) 4(x+7)
- (b) 2(x-6)
- (c) 3(7-x)

1. Solve
$$5(x + 2) = 30$$

 $5(x + 2) = 30$
 $5x + 10 = 30$
 $5x = x = x$

2. Solve
$$7(x-2) = 3\frac{1}{2}$$

3. Solve
$$8(3-x) = 12$$

OS 8.4

Factorisation

Complete the following factorisations:

1.
$$2x + 8 = 2(+)$$

$$2. 6 - 3x = 3(-)$$

$$3. \quad 8x + 6 = 2(+)$$

4.
$$5x + 10 =$$

5.
$$15 - 3x =$$

6.
$$6x + 9 =$$

7.
$$21 - 14x =$$

8.
$$14x + 35 =$$

OS 8.5

1. Expand (x + 4)(x + 5) using the following table:

×	х	5
X		
4		

So
$$(x + 4)(x + 5) = + + + +$$

$$= + +$$

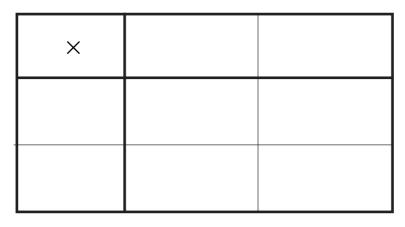
$$= = + + +$$

2. Expand (x + 3)(x + 8) using the following table:

×	Х	3
х		
8		

So
$$(x+3)(x+8) =$$

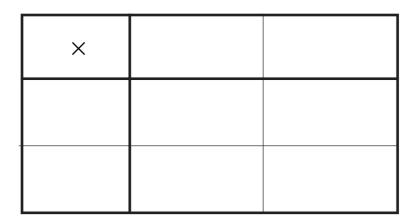
3. Expand (x + 2)(x - 9) using the following table:



So
$$(x+2)(x-9) =$$

=

4. Expand (x-6)(x-7) using the following table:



So
$$(x-6)(x-7) =$$