UNIT 8 *Algebra: Brackets* Overhead Slides

Overhead Slides

OS 8.1 *Negative Numbers*

Calculate:

1. $-6+13 =$

2. $4-22 =$

3. $4+(-7) =$

4. $-6+4 =$

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

6. $-9+4 =$

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

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

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

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

OS 8.2 *Expansion of Single Brackets*

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

$\times$	x	2
4		

So $4(x + 2) =$

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

$\times$		

So $3(x - 5) =$

3. Expand without using a table:

(a) $4(x + 7)$

(b) $2(x - 6)$

(c) $3(7 - x)$

OS 8.3 *Linear Equations*

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

$$\begin{aligned} 5(x+2) &= 30 \\ 5x+10 &= 30 \\ 5x &= \\ x &= \end{aligned}$$

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

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

OS 8.4 *Factorisation*

Complete the following factorisations:

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

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

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

4. $5x + 10 =$

5. $15 - 3x =$

6. $6x + 9 =$

7. $21 - 14x =$

8. $14x + 35 =$

OS 8.5 *Expansion of Two Brackets 1*

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

$\times$	x	5
x		
4		

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

$=$ $+$ $+$

$=$

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

$\times$	x	3
x		
8		

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

OS 8.6 *Expansion of Two Brackets 2*

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

$\times$		

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

$=$

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

$\times$		

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

$=$