SUPER 12s

SUPER 12s CAN BE USED AS AN INDIVIDUALISED MASTERY LEARNING PROGRAM.

2 ALGEBRA
2.6 EXPANDING BRACKETS
2.6 LEVEL 1

NAME: _____

Skill description: Expanding brackets using the distributive law with positive and negative numbers.

Essential Revision: Evaluate the following.

1. -4×6

2. 3×-7

3. -5×-6

4. -1×4

5. -4×-4

6. -8×-6

7.

2×-9

8.

-1×-1

9.

-7×7

10.

9×-3

11.

$-2 \times -3 \times -1$

12.

$-3 \times 5 \times -4$

Solutions can be found at the end of the booklet.

score $\frac{\quad}{12}$

STRATEGIES TO SOLVE THE PROBLEMS

The distributive law

$$a(b+c) = ab + ac$$

Example 1

Use the distributive law to expand the following bracket.

$$3(x+5)$$

Step 1

Multiply the 3 and x.

$$3(x+5) = 3x$$

Step 2

Multiply the 3 and 5. As both the 3 and the 5 are positive the resultant is $+15$.

$$3(x+5) = 3x + 15$$

Example 2

Use the distributive law to expand the following bracket.

$$5(a-2)$$

Step 1

Multiply the 5 and a.

$$5(a-2) = 5a$$

Step 2

Multiply the 5 and -2. As the 5 is a positive number and the -2 a negative, the resultant is -10.

$$5(a-2) = 5a - 10$$

QUESTIONS

Use the distributive law to expand the following brackets.

1. $2(x + 7)$

2. $4(y - 3)$

3. $4(a + 11)$

4. $5(x - 5)$

5. $9(b + 5)$

6. $8(x - 3)$

7.

$2(d-p)$

8.

$a(b+d)$

9.

$a(c-3)$

10.

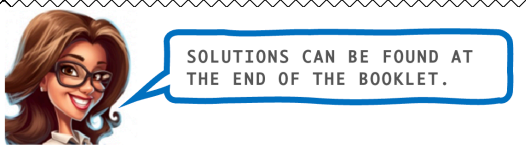
$p(x+12)$

11.

$13(x-3)$

12.

$y(x-z)$



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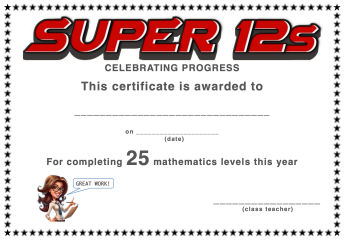
MASTERY TEST

Teacher's signature

I'VE COMPLETED

_____

LEVELS THIS YEAR



Solutions to Essential Revision

1. -24	2. -21
3. 30	4. -4
5. 16	6. 48
7. -18	8. 1
9. -49	10. -27
11. -6	12. 60

Solutions to Questions

1. $2x + 14$	2. $4y - 12$
3. $4a + 44$	4. $5x - 25$
5. $9b + 45$	6. $8x - 24$
7. $2d - 2p$	8. $ab + ad$
9. $ac - 3a$	10. $px + 12p$
11. $13x - 39$	12. $xy - yz$