

Notes 3-2

Int 1

Simplify Algebraic Expressions

Unit 3

Definitions

Expression: Do not have = . could have variables & numbers + or -

$$+5x + 2$$

$$-7 - 3a$$

$$-1 + j - 4 + m$$

$$+1 + 4$$

$$ax^2 + b$$

Term: Terms make up expressions
 • separated by + or -

everything we circled is a term!

Like Term: $8x - 2 + 4x - 6$

$$12x - 8$$

$$\begin{array}{r} -2 + 6 \\ -8 \end{array}$$

Coefficient: a number stuck to a variable

$$4x$$

$$-12y^2$$

Constant: a term that is just a number!

$$4x + 3y - 10 \leftarrow \text{constant}$$

Simplify the following algebraic expressions:

1. $4y + y$

$5y$

2. $4z + 4$

$4z + 4$

3. $4x + 3 + 7x + 7$

$11x + 10$

4. $21b - 3c + 4a - 3b + 2$

$4a + 18b - 3c + 2$

$-3c + 4a + 2 + 18b$

5. $xy + 3z + 4xy$

$5xy + 3z$

6. $-3r + 7 + 3r - 12$

$7 - 12$

-5

7. $a^2 + t^2 - 3a^2 + 2t^2$

$-2a^2 + 3t^2$

8. $22y^2 - 23y^2 + 4y$

$-1y^2 + 4y$

$-y^2 + 4y$

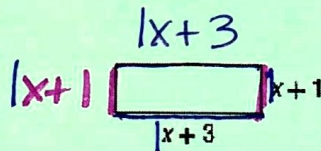
9. $12mn + 3m + 2n + 4m$

$12mn + 7m + 2n$

10. $12xy + 12wx + 2xy$

$14xy + 12wx$

Simplify the perimeter of the following shape.



$4x + 8$

11. $20a + 4ab - 3a^2 + 6ab$

$20a + 10ab - 3a^2$