

Notes
Pre-Algebra
COMBINING LIKE TERMS

1. Examples of Constants :

1, 5, -10, $\frac{1}{2}$, -4 These are constantly the same in their value and never vary.

2. Examples of Variables :

a, b, x, d etc. These are assigned values and can vary.

3. Constants and Variables CANNOT be combined.

ex. $2x + 4$ cannot be simplified/combined

4. Constants can be combined with other constants.

ex. $1 + 4 + 3 = 8$

5. Variables can be combined with their **LOOK ALIKES (Like)**

Variables have coefficients. They are the #s IN FRONT of the variable.

Ex's : In $2x$ 2 is the coefficient

In $4y^2$ 4 is the coefficient

In d 1 is the coefficient ($d = 1d$)

In $0.5cde$ 0.5 is the coefficient

To COMBINE LIKE TERMS:

You need to have terms with the

- **SAME VARIABLES**
and each of those variables needs to be to the
- **SAME POWER**
- You then **ADD THE COEFFICIENTS, NOT THE POWERS!**

Ex's: $\underline{1}x + \underline{1}x = \underline{2}x$ $\underline{2}b^2 + \underline{3}b^2 = \underline{5}b^2$

$3cd + cd = 4cd$ $5a^3e^4 - 2a^3e^4 = 3a^3e^4$

WS#1

NAME _____

DATE _____

PERIOD _____

COMBINING LIKE TERMS

1. $2r + 8r$

2. $2y + 4y$

3. $5g + g$

4. $2r + 4y + 5y$

5. $5r + 3r + r$

6. $y + 3y + 6y$

7. $5g + 3g + g + 8$

8. $8r + 3g + 6y + 2r + 3 + 2g + 5 + 2g$

9. $8r - 2r$

10. $9y - y$

11. $4y + 2g + 4 - 3y + g - y + 5$

12. $3ry + 2ry + r^2 + r^2 + 2rg$

13. $ry + r^3 + ry + r^2$

14. $2yg + r^3 + r^3$

15. $(r + y)4 + 2r$

16. $2(r + y) + r$