# Study Guide 

2.5 Quiz

Distributive Property and Combining Like Terms

Be able to identify terms, like terms, coefficients, and constants.

| Problem | Number of <br> Terms | Give One Set of <br> Like Terms | List the <br> Constants | List the <br> Coefficients |
| :---: | :---: | :---: | :---: | :---: |
| Ex. $-2 x+3 y-4+7 x$ | 4 | $-2 x$ and $7 x$ | -4 | $-2,3,7$ |
| Ex. $5 x-3-6 x+1$ | 4 | $5 x$ and $-6 x$ <br> Or <br> -3 and 1 | $-3,1$ | $5,-6$ |

Be able to simplify using the distributive property.
Ex. $4(3 x+7)$
Ex. $2 x(4 x-5)$
Ex. $-2(x-6)$
$12 x+28$
$8 x^{2}-10 x$
$-2 x+12$

Be able to combine like terms. *REMINDER TO DO KEEP CHANGE OPPOSITE!*
Ex. $2 y+6 y$
Ex. $6 x+5-3 x-8$
Ex. $-2 y+3 x-12 y-10 x$
$8 y$

$$
3 x+-3
$$

$$
-14 y+-7 x
$$

Be able to simplify expressions by distributing and combining like terms.
Ex. $2 x+3(x+5)$

$$
\begin{array}{r}
2 x+3 x+15 \\
5 x+15
\end{array}
$$

Ex. $5(x-7)+2 x$

$$
\begin{aligned}
& 5 x+-35+2 x \\
& 7 x+-35
\end{aligned}
$$

Ex. $3 x-2(x-4)$

$$
\begin{gathered}
3 x+-2 x+8 \\
1 x+8
\end{gathered}
$$

