## Algebra I Class Worksheet \#5 Unit 1

The Distributive Law for Multiplication Over Addition: $\mathbf{x}(\mathbf{y}+\mathbf{z})=\mathbf{x y}+\mathbf{x z}$ The Distributive Law for Multiplication Over Subtraction: $\mathbf{x}(\mathbf{y}-\mathbf{z})=\mathbf{x y} \mathbf{x z}$ Use the appropriate distributive law to write an equivalent expression without parentheses. (Don't leave any 'double signs' in your answers.)

1. $3(x+4)=$ $\qquad$ 2. $6(x-5)=$ $\qquad$
2. $5(2 x+7)=$ $\qquad$
3. $7(3 x-4)=$
4. $-2(x+5)=$ $\qquad$
5. $-3(5 x-4)=$ $\qquad$

Perform the indicated operations. Express your answers in simplest form.
7. $5(3 x+2 y)+2(x+5 y)=$ $\qquad$
8. $\mathbf{3}(\mathbf{2 a}-7 \mathbf{b})+\mathbf{3}(\mathbf{7 a}+3 \mathbf{b})=$ $\qquad$
9. $(5 x+7 y)-(2 x+3 y)=$ $\qquad$ 10. $(2 b+9)-(5 b-2)=$ $\qquad$
11. $2(3 x-8)-3(4 x-5)=$ $\qquad$ 12. $5(4 x+6)-3(5 x+1)=$ $\qquad$

