Practice 5 – Evaluating Expressions

Objective: To evaluate an algebraic expression.

Example:

Evaluate the expression $c+b-23$ if $c=25$ and $b=16$

Solution:	25+16-23	**Substitute the given values for the variables.**
	=41-23	**Simplify by adding 25 and 16.**
	=18	**Subtract 23 from 41.**

Evaluate each expression if x=2 and y = -3. Show ALL work.

1. $2x-y$ **2.** $3y-(2-x)$ **3.** $(7+x)(y-1)$

Evaluate each expression if r=6 and t = 8. Show ALL work.

4. $(r-4)+2t$ **5.** $\left[10-(r\div 3)\right]+2t$ **6.** $\left[3\cdot(t+1)\right]-r$

Practice 6 – Combining Like Terms

Objective: To simplify an algebraic expression by combining like terms.

Example:

Simplify the expression $10x+7-9-x$

Solution:	$10x-x+7-9$	**Rewrite the expression so that the like terms are together.**
	$9x-2$	**Combine like terms (10x and –x and 7 and -9)**

Simplify each expression. Show ALL work.

1. $10x+7+3x$

2. $14+9x-6$

3. $3y-9y+12$

4. $-11n+2+5+3n$

5. $-3x-8y+7x$

6. $-18g+7h-4g-9h$

7. $3t-t$

8. $3x^2+5x^2$

9. $7q+8pq-4pq-9q$

Write an equation to model the situation. Then solve.

10. Tyler can do *x* number of pull-ups. Ryan can do 5 more pull-ups than Tyler. They can do 85 pull-ups in all. How many pull-ups can Ryan?