

An **algebraic expression** is a mathematical statement with operations that involve both numbers and variables. A **coefficient** is a number that appears next to a variable. It represents the number to multiply the variable by to determine that part of the value of the expression.

If  $x = 5$  and  $y = 2$ , what is the value of the expression  $3x + 7y$ ?

- Substitute 5 for  $x$  and 2 for  $y$  in the expression.  $\longrightarrow 3(5) + 7(2)$
- Multiply.  $\longrightarrow 15 + 14$
- Add.  $\longrightarrow 29$

The value of the expression is 29.

**Evaluate the expression. Let  $a = 4$ ,  $b = -2$ ,  $c = 5$ , and  $d = -3$ .**

1. $3a - d$ _____	2. $2c + 5b$ _____	3. $6(c + d)$ _____
4. $7b - 3d$ _____	5. $abc$ _____	6. $9d - 4b$ _____
7. $-2(c + d)$ _____	8. $(b + d)5$ _____	9. $10c - 2a$ _____
10. $-4(d + a)$ _____	11. $11(a - b)$ _____	12. $4b \times 3c$ _____
13. $7ab - 3d$ _____	14. $\frac{ac}{b}$ _____	15. $6c - (b + a)$ _____
16. $8a + 6cb$ _____	17. $8\frac{dc}{ab}$ _____	18. $4b + 3c - 12d$ _____