Use the choices below to fill in each blank. Some choices may be used more than once.

Like   unlike   numerical coefficient   term   distributive

Combine like terms   expression

1. $23y^2 + 10y - 6$ is called a(n) _____ while $23y^2, 10y, and - 6$ are each called a(n)_____.
2. To simplify $x + 4x$, we _____.
3. The term y has an understood _____ of 1.
4. The term 7z and 7y are _____ terms and the terms 7z and –z are _____ terms.
5. For the terms $-\frac{1}{2}xy^2, the\ number\ -\frac{1}{2}$ is the _____.
6. $5(3x - y)$ equals $15x - 5y$ by the _____ property.

Identify the numerical coefficient of each term.

7. $-7y$ 8. $17x^2y$

Indicate whether the terms in each list are like or unlike.

9 . $8wz, \frac{1}{7}zw$ 10. $ab^2, -7ab^2$

Simplify

11. $6g + 5 - 3g - 7$ 12. $8x^3 + x^3 - 11x^3$

13. $-2(4x - 3z - 1)$ 14. $-(y + 5z - 7)$

15. $5(x + 2) - (3x - 4)$

Write each of the following as an algebraic expression. Simplify if possible.

16. Add $6x + 7\ to\ 4x - 10$.

17. Subtract $4x - 7 \; from \; 12 + x$.

Simplify.

18. $-3(2x + 5) - 6x$

19. $3.4m - 4 - 3.4m - 7$

20. $14 - 11(5m + 3n)$

21. $\frac{1}{3}(9x - 6) - (x - 2)$

Write each phrase as an algebraic expression and simplify if possible.

22. Twice a number, decreased by four.

23. The sum of 3 times a number and 10, subtracted from 9 times a number.

24. Eleven, increased by two-thirds of a number.

25. The sum of twice a number, -1, five times a number, and -12.