

## Combining Like Terms

For problems 1 through 21, simplify each expression by combining like terms

**1.**  $6a + 4b + 2a$

**2.**  $-3x + 5x + 3x^2$

**3.**  $-3y + y$

**4.**  $7 + 7y + 8$

**5.**  $-4p - 4p$

**6.**  $-m + m$

**7.**  $ab + bc + 3ac$

**8.**  $8d + 16d$

**9.**  $5a + 7a$

**10.**  $7a + 4b - 2a$

**11.**  $y + 3y$

**12.**  $4k + 8k - 5$

**13.**  $4 + 7p - 6p$

**14.**  $x + 3x + 5x$

**15.**  $3n - n + 3$

**16.**  $9(c + 1) + 2(c + 3)$

**17.**  $8j + k - 7j$

**18.**  $-(4y + 4) + 3y - 6$

**19.**  $9a - 7b - 4a + 9b$

**20.**  $3d + 7d^2 + 12d + 7e$

**21.**  $-5p + (-5p) + 5pq$

For problems 23 through 30 solve each equation and check your solution.

**22.**  $9d + 10 = 2d - 11$

**23.**  $4x - 2 = x + 7$

**24.**  $8y + 5 = 7y + 6$

**25.**  $9 + 8b = b + 23$

**26.**  $-8 + 3n = n + 2$

**27.**  $2y - 3 = 6y + 5$

For problems 28 through 30 write and solve an equation to represent the following phrases.

**28)** Eight more than a number is six less than twice the number.

**29)** Two less than four times a number is ten minus twice the number.

**30)** Six more than three times a number is half of the number plus twelve.