

P. 578 # 3-45 odd

ZERO-PRODUCT PROPERTY Solve the equation.

3. $(x - 5)(x + 3) = 0$

5. $(z - 13)(z - 14) = 0$

7. $(d - 7)\left(d + \frac{4}{3}\right) = 0$

9. $(m - 3)(4m + 12) = 0$

11. $(3n + 11)(n + 1) = 0$

13. $(2y + 5)(7y - 5) = 0$

15. ★ MULTIPLE CHOICE What are the solutions of the equation

$(y - 12)(y + 6) = 0?$

- (A)** -12 and -6 **(B)** -12 and 6 **(C)** -6 and 12 **(D)** 6 and 12

FACTORING EXPRESSIONS Factor out the greatest common monomial factor.

17. $2x + 2y$

19. $3s^4 + 16s$

21. $7w^5 - 35w^2$

23. $15n^3 + 25n$

25. $\frac{5}{2}x^6 - \frac{1}{2}x^4$

SOLVING EQUATIONS Solve the equation.

27. $b^2 + 6b = 0$

29. $-10n^2 + 35n = 0$

31. $18c^2 + 6c = 0$

33. $3k^2 = 6k$

35. $4s^2 = 10s$

37. $28m^2 = -8m$

39. **★ MULTIPLE CHOICE** What are the solutions of $4x^2 = x$?

(A) -4 and 0

(B) $-\frac{1}{4}$ and 0

(C) 0 and $\frac{1}{4}$

(D) 0 and 4

FACTORING EXPRESSIONS Factor out the greatest common monomial factor.

41. $8a^2b - 6ab^2$

43. $v^3 - 5v^2 + 9v$

45. $6q^5 - 21q^4 - 15q^2$