6. I

8. C

16.
a. $-5x^3 + 3x^2 + 7x - 1$
b. 3
c. $-5, 3, 7, -1$
d. -5
e. $-5x^3, 3x^2, 7x, -1$

20. 6

29. $(u^3 - 3u^2 - 4u + 8) - (u^3 - 2u + 4) = u^3 - 3u^2 - 4u + 8 - u^3 + 2u - 4 = -3u^2 - 2u + 4$

34.
$$\begin{array}{r} 2y^3 - 3y + 4 \\ 2y^2 - 5y + 7 \\ \hline +\ 14y^3 \qquad -21y + 28 \\ -10y^4 \qquad +15y^2 - 20y \\ 4y^5 \qquad -\ 6y^3 + 8y^2 \\ \hline 4y^5 - 10y^4 + 8y^3 + 23y^2 - 41y + 28 \end{array}$$

38. $(y + 5)(y + 3) = y^2 + 3y + 5y + 15 = y^2 + 8y + 15$

50. $(5c - 8)^2 - (2c - 5)^2 = (25c^2 - 80c + 64) - (4c^2 - 20c + 25) = 25c^2 - 80c + 64 - 4c^2 + 20c - 25 = 21c^2 - 60c + 39$

54. $(4d - 5)(2d - 1)(3d - 4) = (8d^2 - 14d + 5)(3d - 4)$
$$\begin{array}{r} 8d^2 - 14d + 5 \\ 3d - 4 \\ \hline -32d^2 + 56d - 20 \\ 24d^3 - 42d^2 + 15d \\ \hline 24d^3 - 74d^2 + 71d - 20 \end{array}$$

62. $[(x - 2y) + 7][(x - 2y) - 7] = (x - 2y)^2 - 49$
$= x^2 - 4xy + 4y^2 - 49$

68. $5x^3 - x^2 + 5x - 3 = 5(-1)^3 - (-1)^2 + 5(-1) - 3 = 5(-1) - (1) - 5 - 3 = -5 - 1 - 5 - 3 = -14$

88. $(2x - 3y)^3 = (2x)^3 + 3(2x)^2(-3y) + 3(2x)(-3y)^2 + (-3y)^3 = 8x^3 - 36x^2y + 54xy^2 - 27y^3$