Lesson 2–5 Answers

Assignment - Part A

1.
$$4ab^2(3a^2b^5 + ab^3 - 2)$$

2.
$$5cd(c^2 + 14cd + 12d^2)$$

3.
$$3(3x - 10y)(3x + 10y)$$

4.
$$(n-10p)(n-3p)$$

5.
$$(x-1)^2(x+1)^2$$

6.
$$(3x-1)(x+2)$$

7.
$$3x^3y^3(6x + 3y - 1)$$

8.
$$4(2w + 1)(w - 6)$$

9.
$$(d + 3)^2$$

10.
$$(3x - \frac{1}{2}y)(3x + \frac{1}{2}y)$$

11.
$$5xy(x + y)(9x - 2y)$$

12.
$$b(50a + 9b)$$

13. DNF
$$\rightarrow$$
 no 2 #s add to 1 & multiply to 20

14.
$$(x + 11)(x - 1)$$

15.
$$s(r + 2s)(r + s)$$

16. DNF
$$\rightarrow$$
 no 2 #s add to 4 & multiply to 5

17.
$$5t(2s + 3)$$

18.
$$(7w + 10)(x - w)$$

19.
$$(x-5)(x+5)(x^2+25)$$

20.
$$(3a + 2b)(a - 4b)$$

21.
$$(x + 2)^3 (x - 2)$$

22.
$$(x-11)(x+1)$$

23.
$$(j-13)(j+13)$$

24.
$$(3x + y)(2x + 7y)$$

25.
$$(a-2x)(a+12x)$$

26.
$$(3x^2 - 5)(2x + 1)$$

27.
$$(4a - b)(3a - b)$$

28.
$$(9b - 8)(9b + 8)$$

29.
$$(5x^2 + 3y - 1)(8 - x)$$

30. DNF
$$\rightarrow$$
 not a difference of squares

31.
$$2(x^4 + 5x^2 + 36)$$

32.
$$(2x-1)(2x+1)(4x^2+1)$$

33.
$$(3m^2 + 4)(m + 7n)$$

34.
$$-3(y-27)(y+2)$$

35.
$$2w(3w-5)(w-3)$$

36.
$$(3c + 4d)(2c - 3d)$$

37.
$$(2x + 5)^2$$

38.
$$(5x - 2y)^2$$

39.
$$mn^2(m-2)^2$$

40.
$$2x(x+3)^2$$

Assignment – Part B

1.
$$(40-2x)$$
; $(18+x)$

2. 12x + 20y. Factor the expression and then multiply the length of a single side (factor) by 4.

b)
$$2x - 1$$
 by $4x + 7$

4. a)
$$h = -5(t-6)(t+1)$$