

$$D = [0 \ 0 \ 0 \ 0]$$

$$V = [0 \ 0 \ 0 \ 0 \ 0 \ 0]$$

$$D = [0 \ 0 \ 0 \ 1]$$

$$D(x) = x^0$$

$$V(x) = (1 + x + x^3)x^3$$

$$= x^3 + x^4 + x^6$$

$$= [0 \ 0 \ 0 \ 1 \ 1 \ 0 \ 1]$$

$$D = [0 \ 0 \ 1 \ 0]$$

$$D(x) = x^2$$

$$V(x) = (1 + x + x^3)x^2$$

$$= x^2 + x^3 + x^5$$

$$= [0 \ 0 \ 1 \ 1 \ 0 \ 1 \ 0]$$

$$D = [0 \ 0 \ 1 \ 1]$$

$$D(x) = x^2 + x^3$$

$$V(x) = (1 + x + x^3)(x^2 + x^3)$$

$$= x^2 + x^3 + x^3 + x^4 + x^5 + x^6$$

$$= [0 \ 0 \ 1 \ 0 \ 1 \ 1 \ 1]$$

$$D = [0 \ 1 \ 0 \ 0]$$

$$D(x) = x$$

$$V(x) = (1+x+x^3)x$$

$$= x + x^2 + x^4$$

$$[0 \ 1 \ 1 \ 0 \ 1 \ 0 \ 0]$$

$$D = [0 \ 1 \ 0 \ 1]$$

$$D(x) = x + x^3$$

$$V(x) = (1+x+x^3)(x+x^3)$$

$$= x + x^3 + x^2 + \cancel{x^4} + \cancel{x^4} + x^6$$

$$[0 \ 1 \ 1 \ 1 \ 0 \ 0 \ 1]$$

$$D = [0 \ 1 \ 1 \ 0]$$

$$D(x) = x^4 + x^2$$

$$V(x) = (1+x+x^3)(x^4+x^2)$$

$$= \cancel{x^2} + \cancel{x^3} + \cancel{x^3} + \cancel{x^4} + \cancel{x^5} + \cancel{x^6}$$

$$x + \cancel{x^2} + \cancel{x^2} + x^3 + x^4 + x^5$$

$$= \cancel{[0 \ 0 \ 1 \ 0 \ 1 \ 1 \ 1]} \cdot [0 \ 1 \ 0 \ 1 \ 1 \ 1 \ 0]$$

$$D = [0 \ 1 \ 1 \ 1]$$

$$D(x) = x + x^2 + x^3$$

$$V(x) = (1+x+x^3)(x+x^2+x^3)$$

$$= x + x^2 + x^3 + \cancel{x^2} + \cancel{x^5} + \cancel{x^4} + \cancel{x^4} + \cancel{x^5} + x^6$$

$$[0100011]$$

$$p = [1000]$$

$$D(x) = 1$$

$$V(x) = 1 + x + x^3$$

$$[101000]$$

$$p = [1001]$$

$$D(x) = 1 + x^3$$

$$V(x) = (1 + x + x^3)(1 + x^3)$$

$$= 1 + x^3 + x + x^4 + x^3 + x^6$$

$$[1100101]$$

$$p = [1010]$$

$$D(x) = 1 + x^{-2}$$

$$V(x) = (1 + x + x^3)(1 + x^2)$$

$$= 1 + x^2 + x + x^3 + x^3 + x^5$$

$$= [1110010]$$

$$p = [1011]$$

$$p(x) = 1 + x^2 + x^3$$

$$v(x) = (1 + x + x^3)(1 + x^2 + x^3)$$

$$= 1 + x^2 + x^3 + x + x^3 + x^4 + x^3 + x^5 + x^6$$

$$= [1 \ 1 \ 1 \ 0 \ 1 \ 1 \ 1]$$

$$D = [1 \ 1 \ 0 \ 0]$$

$$p(x) = 1 + x$$

$$v(x) = (1 + x + x^3)(1 + x)$$

$$= 1 + x + x + x^2 + x^3 + x^4$$

$$= [1 \ 0 \ 1 \ 1 \ 1 \ 0 \ 0]$$

$$D = [1 \ 1 \ 0 \ 1]$$

$$D(x) = 1 + x + x^3$$

$$v(x) = (1 + x + x^3)(1 + x + x^3)$$

$$= 1 + x + x^3 + x + x^2 + x^4 + x^3 + x^4 + x^6$$

$$= [1 \ 0 \ 0 \ 0 \ 0 \ 0 \ 1]$$

$$D = [1110]$$

$$D(x) = 1 + x + x^2$$

$$V(x) = (1 + x + x^3)(1 + x + x^2)$$

$$= 1 + x + x^2 + x + x^2 + x^3 + x^3 + x^4 + x^5$$

$$= [1000110]$$

$$D = [1111]$$

$$D(x) = 1 + x + x^2 + x^3$$

$$V(x) = (1 + x)(1 + x^3)(1 + x + x^2 + x^3)$$

$$= 1 + x + x^2 + x^3 + x + x^2 + x^3 + x^4 + x^3 + x^4 + x^5 + x^6$$

$$= [1001011]$$
