

2 (iv) 1, 1

$$\text{Sum of zeros } (s) = 1$$

$$\text{Product of zeros } (p) = 1$$

required polynomial

$$= k(x^2 - sx + p)$$

$$= k(x^2 - 1x + 1)$$

$$= x^2 - x + 1 \quad (k=1)$$

2 (v)

$$\text{Sum of zeros } (s) = -\frac{1}{4}$$

$$\text{Product of zeros } (p) = \frac{1}{4}$$

required polynomial

$$= k(x^2 - sx + p)$$

$$= k(x^2 + \frac{1}{4}x + \frac{1}{4})$$

$$= 4\left(\frac{4x^2 + x + 1}{4}\right) \quad (k=4)$$

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

2 (vi)

$$\text{Sum of zeros } (s) = 4$$

$$\text{Product of zeros } (p) = 1$$

required polynomials

$$= k(x^2 - sx + p)$$

$$= k(x^2 - 4x + 1)$$

$$= x^2 - 4x + 1 \quad (k=1)$$