

4.14  
7

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

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

$$p(0) = -2 \quad p(1) = 0 \quad p(-1) = -2$$

$$p(-2) = 1 \quad p(-3) = 1$$

$$p(x) = x(x^2+x-2)D(x) + ax^2+bx+c$$

$$p(x) = x(x+2)(x-1)D(x) + ax^2+bx+c$$

$$-2 = p(0) = c$$

$$0 = p(1) = a+b+c \rightarrow \boxed{a+b=2}$$

$$1 = p(-2) = 4a-2b+c \rightarrow \boxed{4a-2b=3}$$

$$a = \frac{7}{6}$$

$$b = \frac{5}{6}$$

$$\frac{7}{6}x^2 + \frac{5}{6}x - 2 \quad \text{us anken}$$