$$\cancel{x^{10}} \quad \cancel{x^{7}} \quad x^{6} \quad x^{4} \quad \Big| \; x^{3} \quad x^{2} \quad 1$$

$$\cancel{x^{10}} \quad x^{9} \quad \cancel{x^{7}}$$

$$x^{7} + x^{6} + x^{5} + x^{4} + x^{3} + 1$$

$$\cancel{x^{9}} \quad \cancel{x^{6}} \quad x^{4}$$

$$\cancel{x^{9}} \quad x^{8} \quad \cancel{x^{6}}$$

$$\cancel{x^{8}} \quad x^{4}$$

$$\cancel{x^{8}} \quad x^{7} \quad x^{5}$$

$$\cancel{x^{7}} \quad x^{5} \quad \cancel{x^{4}}$$

$$\cancel{x^{7}} \quad x^{6} \quad \cancel{x^{4}}$$

$$\cancel{x^{6}} \quad \cancel{x^{5}}$$

$$\cancel{x^{6}} \quad \cancel{x^{5}} \quad x^{3}$$

$$x^{3}$$

$$x^{3} \quad x^{2} \quad 1$$

$$R_{(x)} = x^{2} + 1$$