Find the quotient if the polynomial x^3+2x^2+3x-6 is divided by $x-1$

$$x-1 \overline{)\, x^3+2x^2+3x-6}$$

x^2+3x+6 ← quotient

$x-1$ ← divisor

x^3+2x^2+3x-6 ← dividend

$-x^3+x^2$

$3x^2+3x$

$-3x^2+3x$

$6x-6$

$-6x+6$

0 ← Remainder = 0

$$2x^3+6x+9 \div x-1$$

$$x-1 \overline{)\, 2x^3+0x^2+6x+9}$$

$$2x^3+2x^2+9 \div x-1$$

$$x-1 \overline{)\, 2x^3+2x^2+0x+9}$$