

$$\begin{array}{r}
 \text{multiply} \quad \boxed{2x+3} \\
 \boxed{x+2} \overline{) 2x^2 + 7x + 6} \\
 \underline{2x^2 + 4x} \quad \leftarrow \text{(subtract)} \\
 3x + 6 \\
 \underline{3x + 6} \quad \leftarrow \text{(subtract)} \\
 0 \text{ remainder}
 \end{array}$$

MathBits

Section 1: Use long division to divide the polynomials below:

a. $(x^2 + 5x + 6) \div (x + 3)$

b. $(5x^2 - 17x - 12) \div (x - 4)$

c. $(x^3 + 5x^2 - 12x - 36) \div (x + 2)$

d. $(2x^3 - 3x^2 - 50x + 75) \div (2x - 3)$