MATH **017** CLASSWORK 18

───

The idea in this CLASSWORK is to check that, as in arithmetic, *division is the reverse of multiplication*. So, first we multiply the two given polynomials and then we divide the resulting polynomial by either one of the given polynomials and check that the quotient polynomial is the other given polynomial.

$_{Cw}$ **18-1. i.** Identify $-5x^3 + 3x^2 - 7x$ $\boxtimes$ $-2x^2 + 7$

ii. Divide the result in **i.** by $-5x^2 - 3x - 7$

iii. Divide the result in **i.** by $-2x + 7x^{-2}$

Cw **18-2.** **i.** Identify $-5x^3 + 3x^2 - 7x$ $\boxtimes$ $-2x^2 + 7$

ii. Add $3x + 1$ to the result in **i.**

iii. Divide the result in **ii.** by $-2x^2 + 7$

iv. Add $x^2 + x + 1$ to the result in **i.**

v. Divide the result in **iv.** by $-5x^3 - 3x^2 - 7x$