

Practice for section 2.3 Synthetic division

The following problems will help you practice the material you learned today. Once you are finished check your solutions. Once done, you can work on your WeBWork homework.

1. Divide each of these using synthetic division if practical:

$$(x^4 - 3x^2 + x - 2) \div (x^2 + 1)$$

$$(x^5 - 1) \div (x - 1)$$

$$(3x^3 + x - 1) \div (x + 2)$$

$$(3x^3 + x - 2) \div (x - 2)$$

2. For this function $f(x) = x^3 - 7x + 6$

Divide by $(x-2)$

find $f(2)$

Divide by $(x+1)$

find $f(-1)$

Divide by $(x+2)$

$f(-2) =$

Divide by $(x+3)$

find $f(-3)$

What can you conclude?