**MHF4U – Graphing and Finding Zeros with the Help of Long Division**

INTRODUCTION

Divide 64 by 15

So 64 = \_\_\_\_ x \_\_\_\_\_\_

Divide 918 by 54

So 918 = \_\_\_\_\_ x \_\_\_\_\_\_\_

PROBLEM 1:

1. Divide x3 +4x2 -4x -7

by (x+1).

DON’T ERASE THIS WORK!!!

1. Sketch f(x)= x3 +4x2 -4x -7

* Basic Shape
* End behaviors
* y-intercept

1. Write f(x) in factored form (using what you found in #1)
2. Now make a better sketch from what you see in the factored form.

PROBLEM 2:

1. Divide x3 – 7x -6 by (x-3)
2. Sketch

Basic Shape

End behaviors

y-intercept

1. Write f(x) in factored form (using what you found in #1)
2. Now make a better sketch from what you see in the factored form.

PROBLEM 3:

Sketch

if you know that (2x-5) is a factor.

PROBLEM 4:

Sketch

if you know that (x+5) is a factor.

PROBLEM 5:

Sketch

if you know that (x-3) is a factor.

PROBLEM 6:

if you know that (x+2) is a factor.