

# Math 115E Activity 12

Chapter 5 Prereqs  
Number puzzles

**Helpful tips.** *All of the solutions to the following problems will be integers meaning numbers like  $\dots -3, -2, -1, 0, 1, 2, 3, \dots$ , so no fractions and no decimals at all*

## Section 1: Finding two numbers to solve the puzzle

#1 Give me two numbers such that: they both multiply to -6 and yet both add to 1

#2 Give me two numbers such that: they both multiply to -6 and yet both add to -1

#3 Give me two numbers such that: they both multiply to 20 and yet both add to -9

#4 Give me two numbers such that: they both multiply to 6 and yet both add to 7

#5 Give me two numbers such that: they both multiply to -80 and yet both add to -2

#6 Give me two numbers such that: they both multiply to 42 and yet both add to 13

## Section 2: Finding two numbers again but harder

#1 Find two numbers such that:

the first number and the second number both multiply to -15,  
and the first plus the product of 2 and the second number give us -7

#2 Find two numbers such that:

the first number and the second number both multiply to 24,  
and the first plus the product of 3 and the second number give us 22

#3 Find two numbers such that:

the first number and the second number both multiply to 4,  
and the first plus the product of 2 and the second number give us 6

#4 Find two numbers such that:

the first number and the second number both multiply to 6,  
and the first plus the product of 4 and the second number give us -14

#5 Find two numbers such that:

the first number and the second number both multiply to -2,  
and the first plus the product of 2 and the second number give us 3

#6 Find two numbers such that:

the first number and the second number both multiply to -16,  
and the first plus the product of 3 and the second number give us -8