# Adding Integers with Tiles

Recall that +1 and –1 combine to make a zero pair.  We can use algebra tiles to model the addition of any two integers.  There are three situations that can come up:

## Case 1:  Adding Two Positive Integers

**Example:  (+4) + (+3)**

1.  Model each integer with tiles:

+4: 🟨 🟨 🟨 🟨

+3: 🟨 🟨 🟨

2.  Combine the tiles:

🟨 🟨 🟨 🟨 🟨 🟨 🟨

There are 7 yellow tiles so they model +7.  We can write the **addition equation** like this:  (+4) + (+3) = +7
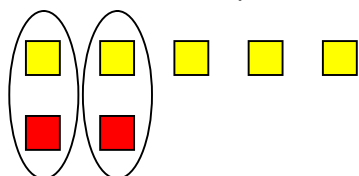
## Case 2:  Adding One Positive and One Negative Integer

**Example:  (+5) + (-2)**

1.  Model each integer with tiles:

+5: 🟨 🟨 🟨 🟨 🟨

-2: 🟥 🟥

2.  Circle the zero pairs.

🟨 🟨 🟨 🟨 🟨
🟥 🟥

There are two zero pairs.  Three yellow tiles are left, so the solution is +3.

## Case 3:  Adding Two Negative Integers

**Example:  (-4) + (-5)**

1.  Model each integer with tiles:

-4: 🟥 🟥 🟥 🟥

-5: 🟥 🟥 🟥 🟥 🟥

2.  Combine the tiles:

🟥 🟥 🟥 🟥 🟥 🟥 🟥 🟥 🟥

There are 9 red tiles, so they model -9.