

## 2.3 Subtracting Integers

Recall

Different meanings of “-” symbol.

1. signed number
2. opposite
3. subtraction

### Subtraction Rule

To subtract two numbers,

1. Change subtraction by adding opposite.
2. Follow addition rule.
  - (i) Same sign, add the numbers and keep the common sign.
  - (ii) Different sign, subtract the numbers (Large – Small) and keep the sign of larger number.

**Ex 1.** Perform indicated operations.

a.  $13 - 4$

b.  $-8 - 5$

c.  $11 - (-15)$

d.  $-4 - (-13)$

e.  $-64 - 53 - 21 - (-39)$

f.  $88 + (-22) - 99 - (-77)$

g.  $-12 + 74 - (-89) - 31$

h.  $-109 - (-73) + (-49) - 61 - (-54)$

**Ex 2.** Evaluate  $-x - 3y$  for  $x = -6, y = 2$ .

**Ex 3.** Evaluate  $r - 2s - t$  for  $r = -7, s = 4, t = -13$ .

**Ex 4.** The highest point in Asia is the top of Mount Everest, at a height of 29028 feet above sea level. The lowest point is the Dead Sea, which is 1312 feet below sea level. How much higher is Mount Everest than the Dead Sea?

**Ex 5.** Record low temperature in CA is  $-45^{\circ} F$ . Record high temperature in CA is  $134^{\circ} F$ . What is the difference between record high and low temperature?

**Ex 6.**  $-49$  subtracted from  $-28$ .