**Multiplying Rational Numbers**

**Different Signs:**

**Products of Rational Numbers**

|  |  |  |
| --- | --- | --- |
| Sign of Factor p | Sign of Factor q | Sign of Product pq |
| + | – | – |
| – | + | – |

Ex (1): Aminata hiked down a canyon and stopped each time she descended **½** mile to rest. She hiked a total of **4** sections. What is her overall change in elevation?

Step(1): Write an equation (descended ½ mile a total of 4 sections (4x))

Step(2): Solve the equation

**Same Signs:**

**Products of Rational Numbers**

|  |  |  |
| --- | --- | --- |
| Sign of Factor p | Sign of Factor q | Sign of Product pq |
| + | + | + |
| – | – | + |

Ex (2): Multiply (– 2)( – 3.5)

(-2)(-3.5) 🡪 [(-)(-)] = [+] and (2)(3.5) = 7 🡪 +7

Multiplication Prob 🡪 Multiply signs then Multiply numbers 🡪 Attach sign and #

Ex (3): Multiply (-3)(-1.25)

(-3)(-1.25) 🡪 [(-)(-)] =[+] and (3)(1.25) = 3.75 🡪 +3.75