SAT - Commonly Tested Quadratics

Rule 1: x2 – y2 =

Ex) x2 – 16 =

 x2 - 25 =

Rule 2: x2 + 2xy + y2 = (x + y)(x + y) =

 Ex) x2 + 8x + 16 =

Rule 3: x2 – 2xy – y2 = (x – y)(x – y) =

 Ex) x2 – 6x + 9 = (x – 3)(x – 3) =

SAT Style Questions:

Ex) If a2 – b2 = 12 and a + b = 4, what is the value of a – b?

Ex) If x2 = y2 + 8 and x + y = 6, what does x – y = ?

Ex) If a2 + b2 = 20 and 2ab = 6, what is the value of 2(a + b)2 ?

Ex) If (a + b)2 = 64 and (a – b)2 = 36, what is the value of a ?

Ex) If (3x – 6)(3x + 6) = 12, what does (9x2 – 36) = ?