

$$a^2 + b^2 + c^2 = A$$

$$(a + b + c)^2 = B$$

Find B-A

$$(a + b + c)^2 - (a^2 + b^2 + c^2) = B - A$$

$$(a + b + c)(a + b + c) - (a^2 + b^2 + c^2) = B - A$$

$$(a^2 + ab + ac + ba + b^2 + bc + ca + cb + c^2) - (a^2 + b^2 + c^2) = B - A$$

$$2ab + 2ac + 2bc = B - A$$