



$$\begin{aligned}
 & bc(bd + ac) + ad(ac + bd) = (ac + bc)(ad + bd) \\
 x^2 &= a^2 + b^2 - \frac{ab(a^2 + b^2 - c^2 - d^2)}{ab + cd} \\
 &= \frac{a^2 cd + b^2 cd + abc^2 + abd^2}{ab + cd} \\
 &= \frac{(a^2 + b^2)cd + ab(c^2 + d^2)}{ab + cd} \\
 &= \frac{(ac)(ad) + (bc)(bd) + (ac)(bc) + (ad)(bd)}{ab + cd}
 \end{aligned}$$

$$x^2 = \frac{(ad+bc)(ac+bd)}{(ab+cd)}$$

$$y^2 =$$