ex 8.2

(9) $2\sin\theta$ can be $a+\frac{1}{a}$

$\because$ a is +ve and >1

let $a=2$

$a+\frac{1}{a}$

$=2+\frac{1}{2}$

$=\frac{4+1}{2}$

$=\frac{5}{2}$

which is greater than 1

$\therefore$ False [Max value of $2\sin\theta=1$]

$\frac{(a-b)^2}{2ab}$ is +ve

[$\because (a-b)^2, ab>0$]

$\therefore \cos\theta=\frac{(a-b)^2}{2ab}+2$

which is greater than 2

$\therefore$ False [Max. value of $\cos\theta=1$]

NCERT Exemplar Solutions by Dev Anoop (Bathinda)

(10) $\cos\theta=\frac{a^2+b^2}{2ab}$

$=\frac{(a-b)^2+2ab}{2ab}$

$=\frac{(a-b)^2}{2ab}+\frac{2ab}{2ab}$