

$$kD - S_L = D$$

ms says
 $\tan^{-1} \frac{1}{2} = 26.5^\circ$
 $72 = 63.4^\circ$
 angle is 153.4°

if equations of lines change
 to $y = mx$ and $y = nx$
 $D = \frac{a}{|m-n|}$

$$5) S_D - S_L = (x_2 - x_1) - (x_4 - x_3) = (x_2 + x_3) - (x_1 + x_4)$$

$x_2 + x_3$ is sum of roots of
 $ax^2 + x(b-1) + c = 0, x_1 + x_2 = -(b-1)$

$x_1 + x_4$ is sum of roots of
 $ax^2 + x(b-2) + c = 0, x_1 + x_2 = -(b-2)$

could do

$$S_D - S_L = (x_2 - x_1) - (x_4 - x_3) = (x_2 + x_3 + x_5) - (x_1 + x_3 + x_6) = (x_2 + x_5) - (x_1 + x_6)$$

-coefficient of x^2 is

$$ax^3 + bx^2 + cx + d$$

then $x_2 + x_3 + x_6 = -b$ etc
 can be extended to higher
 orders in same way