Intersection stuff yield fn lines:

Store s_0 & ds in matrix form:

$$s_0^T = \begin{bmatrix} s_0(0,0) & s_0(1,0) & \\ s_0(0,1) & s_0(1,1) & \cdots \\ s_0(0,2) & s_0(1,2) & \end{bmatrix}$$

$$ds^T = \begin{bmatrix} ds(0,0) & ds(1,0) & \\ ds(0,1) & ds(1,1) & \cdots \\ ds(0,2) & ds(1,2) & \end{bmatrix}$$

Need to solve for x & y such that:

$$s_0[i] + x\, ds[i] = s_0[i+1] + y\, ds[i+1]$$

but since we only have 2 vars we can

$$s_0[i,0:2] + x\, ds[i,0:2] = s_0[i+1,0:2] + y\, ds[i+1,0:2]$$

```
for i in range (5)
    eqns = s0[i,0:2] + x ds[i,0:2] - s0[i+1,0:2] - y ds[i+1,0:2]
    sol = solve (eqns)
    s1[i] = s0[i] + sol(x) ds[i]
# pt. between i = 5 & i = 0
# add s1[6] = s1[0]
```