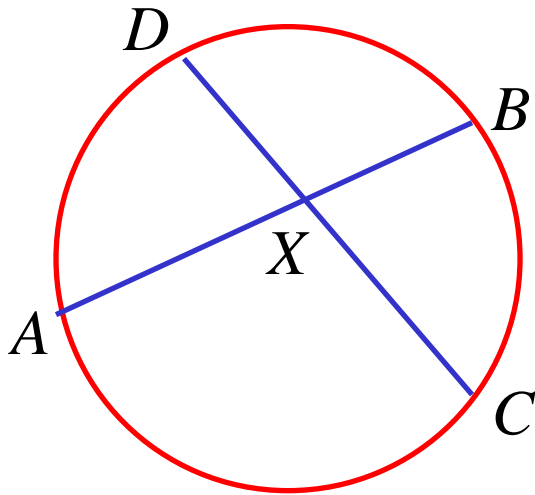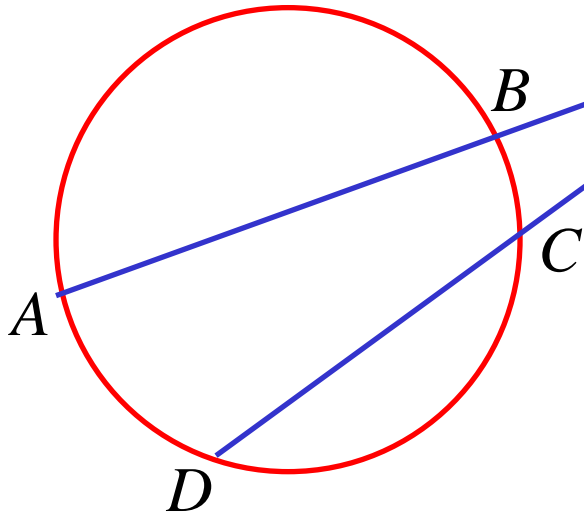# *Products of Intercepts*

$$AX \cdot BX = CX \cdot DX$$

(product of intercepts of intersecting chords)

"endpoint of the chord to the point of intersection (*AX*) times endpoint of the chord to the point of intersection (*BX*) **equals** endpoint of the chord to the point of intersection (*CX*) times endpoint of the chord to the point of intersection (*DX*)
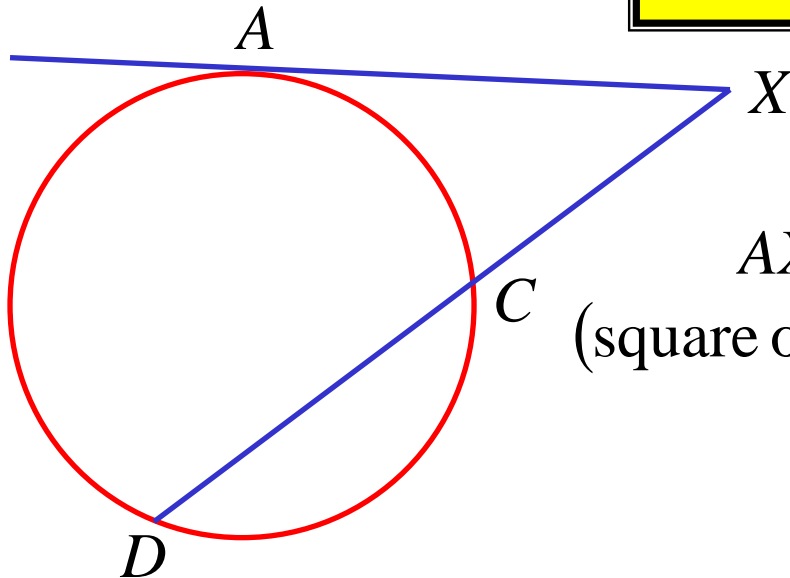
Note: secants intersect outside the circle

$$AX \cdot BX = CX \cdot DX$$

$\big($product of intercepts of intersecting secants$\big)$

Exercise 9G; 1ace, 2, 4, 6, 9a

$$AX^2 = CX \cdot DX$$

$\big($square of tangents $=$ product of intercepts$\big)$