

★ X-Wing

An **X-Wing** has exactly two possible positions for one digit in each of two rows, lined up in the same two columns. The digit must occupy opposite corners, so remove it from the other cells in those columns.

The pattern also works sideways: two columns confine the digit to two rows. Then remove it from the rest of those rows. Look for the same two positions across two base lines.

Example — X-Wing

Track candidate 8 in Rows 3 and 5. In each row it can appear only in Columns 5 and 6. The four red corners form an X-Wing; other candidates in those corners are omitted so you can follow this digit.

	C1	C2	C3	C4	C5	C6	C7	C8	C9
R1	9				3				
R2			7	4		¹ 8	2		5
R3		1		6	8	8		9	4
R4	5		8		2				
R5	4	7		9	8	8			
R6		3					8	4	
R7	8		4			3	9	2	
R8					7	9	4	3	
R9						2			

The two rows need two copies of the digit. They must occupy different cover columns, so each cover column receives one.

Next Step — Eliminate and Place

The X-Wing claims candidate 8 in both cover columns. Remove 8 from R2C6 outside the two base rows. Its candidates change from {1, 8} to {1}.

	C1	C2	C3	C4	C5	C6	C7	C8	C9
R1	9				3				
R2			7	4		1	2		5
R3		1		6	8	8		9	4
R4	5		8		2				
R5	4	7		9	8	8			
R6		3					8	4	
R7	8		4			3	9	2	
R8					7	9	4	3	
R9						2			

Place 1 in R2C6. This single was not available before the X-Wing; now rescan its row, column, and box.