\{Y_1, Y_3, Y_6, Y_8, Y_{10}\}^2 \text{ is the visible subset of } \{Y_1, \ldots, Y_{10}\}^3.

In Claim 2, this visible subset is called \{Y_1, Y_2, Y_3, \ldots, Y_{10}\}^3.

In this example, \( t = 5 \) and \( y_1 = Y_1, y_2 = Y_3, \ldots \) as shown above.

If we add a line to this set, \( y_{10} = Y_{10} \) in Claim 2), then the visible subset of \{Y_1, Y_2, \ldots, Y_{10}\}^3 will contain a subset of the visible subset of \{Y_1, Y_2, \ldots, Y_{10}\}^3 and \( y_{11} \). That is, adding a line can't make something visible that was previously not visible.

Notice that the visible subset of \{Y_1, Y_2, \ldots, Y_{11}\}^3.

\( \overrightarrow{\{Y_1, Y_3, Y_6, Y_{11}\}^3} \) (in red above)

This is a prefix of \( \overrightarrow{\{Y_1, Y_3, Y_6, Y_{10}\}^3} \).

You must show that this "prefix" idea is true in general.

In this example, \( j_e = 10 \) and \( j_k = 6 \). (\( y_{10} = Y_{10} \) and \( y_{11} = Y_6 \)).