

The Puzzle

Jack is looking at Anne. Anne is looking at George.

Jack is married. George is not married.

Is a married person looking at an unmarried person?

A Solution

There are a variety of ways to represent this problem.

Let's use a GRID.

Can we solve it from this grid alone?

	MARRIED	LOOKING at ...
JACK	√	ANNE
ANNE	?	GEORGE
GEORGE	X	?

Jack is married and looking at Anne.

But we do not know if Anne is married or not.

Equally, Ann is looking at George who is unmarried. But still we do not know if Anne is married or not.

So in both cases we only have half a solution?

CLUE Does it matter whether Anne is married or not?

Let's see what happens if Anne is married.

	MARRIED	LOOKING at ...
JACK	✓	ANNE
ANNE	✓	GEORGE
GEORGE	X	?

Jack is married and looking at Anne who is now married. (NOT a solution)

**But Anne is now married and looking at George who is unmarried.
(BINGO! a solution)**

And then what happens if Anne is unmarried.

	MARRIED	LOOKING at ...
JACK	✓	ANNE
ANNE	X	GEORGE
GEORGE	X	?

Jack is married and looking at Anne who is now not married.

(Also a solution)

So we can conclude that a married person is looking at an unmarried person.

Try these ones

There are lots more problems on our website (ncca.ie) or on bebras.uk where drawing a grid can help solve a problem in a systematic fashion or sometimes allow you to see a solution to a puzzle.

Another Puzzle (where a grid might help)

3 friends decide to go on a trip in their new electric cars.

Their batteries are empty and need to be re-charged.

It takes 3 hours to fully charge the car battery.

The problem is there are only 2 charging points available.

The cars don't have to be charged all in one go.

How soon can they leave with fully charged batteries?

