

<p>If there are 4 people...</p>	<p>Can each person high five exactly 1 other person?</p> <p>Yes No</p> <p>If yes, how many total high fives will take place?</p>	<p>Can each person high five exactly 2 different people?</p> <p>Yes No</p> <p>If yes, how many total high fives will take place?</p>	<p>Can each person high five exactly 3 different people?</p> <p>Yes No</p> <p>If yes, how many total high fives will take place?</p>	<p>Can each person high five exactly 4 different people?</p> <p>Yes No</p> <p>If yes, how many total high fives will take place?</p>	<p>Can each person high five exactly 5 different people?</p> <p>Yes No</p> <p>If yes, how many total high fives will take place?</p>
<p>If there are 5 people...</p>	<p>Can each person high five exactly 1 other person?</p> <p>Yes No</p> <p>If yes, how many total high fives will take place?</p>	<p>Can each person high five exactly 2 different people?</p> <p>Yes No</p> <p>If yes, how many total high fives will take place?</p>	<p>Can each person high five exactly 3 different people?</p> <p>Yes No</p> <p>If yes, how many total high fives will take place?</p>	<p>Can each person high five exactly 4 different people?</p> <p>Yes No</p> <p>If yes, how many total high fives will take place?</p>	<p>Can each person high five exactly 5 different people?</p> <p>Yes No</p> <p>If yes, how many total high fives will take place?</p>
<p>If there are 6 people...</p>	<p>Can each person high five exactly 1 other person?</p> <p>Yes No</p> <p>If yes, how many total high fives will take place?</p>	<p>Can each person high five exactly 2 different people?</p> <p>Yes No</p> <p>If yes, how many total high fives will take place?</p>	<p>Can each person high five exactly 3 different people?</p> <p>Yes No</p> <p>If yes, how many total high fives will take place?</p>	<p>Can each person high five exactly 4 different people?</p> <p>Yes No</p> <p>If yes, how many total high fives will take place?</p>	<p>Can each person high five exactly 5 different people?</p> <p>Yes No</p> <p>If yes, how many total high fives will take place?</p>

Here's a more compact way of recording the information from the front side of the handout.

For each high five challenge:

- If it's **possible**, write the total number of high fives that will occur.
- If it's **impossible**, write an **X**.

		How many different people does each person high five?							
		1	2	3	4	5	6	7	8
How many people are there?	4								
	5								
	6								
	7								
	8								