Name: _____

Date: _____

Different Plates

You have two lego plates of different sizes. One is m studs wide and n studs long, and the other is p studs wide and q studs long. You start with the m by n plate flat on the table in front of you. How many different ways can you position the p by q plate on top of the first one, so it is connected by at least one stud?

Show your work, and write your answer in a complete sentence.