

Movie Maths

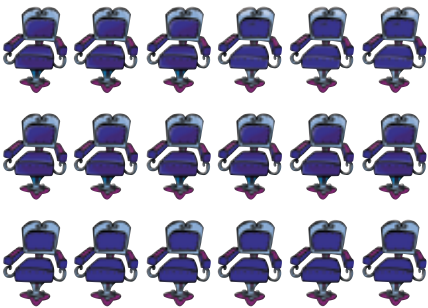
You need a classmate

Activity

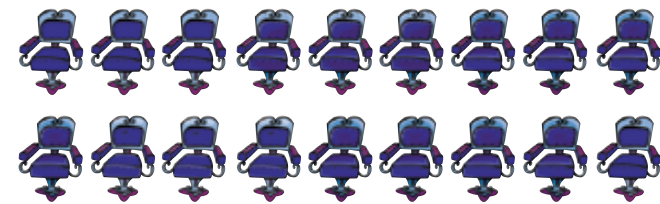


Mikhail's teacher takes him and 16 of his classmates to the movies. The usher seats them in equal-sized rows. Mikhail notices that there are more people in each row than the total number of rows in their block of seats.

Here are the ways they could be seated:



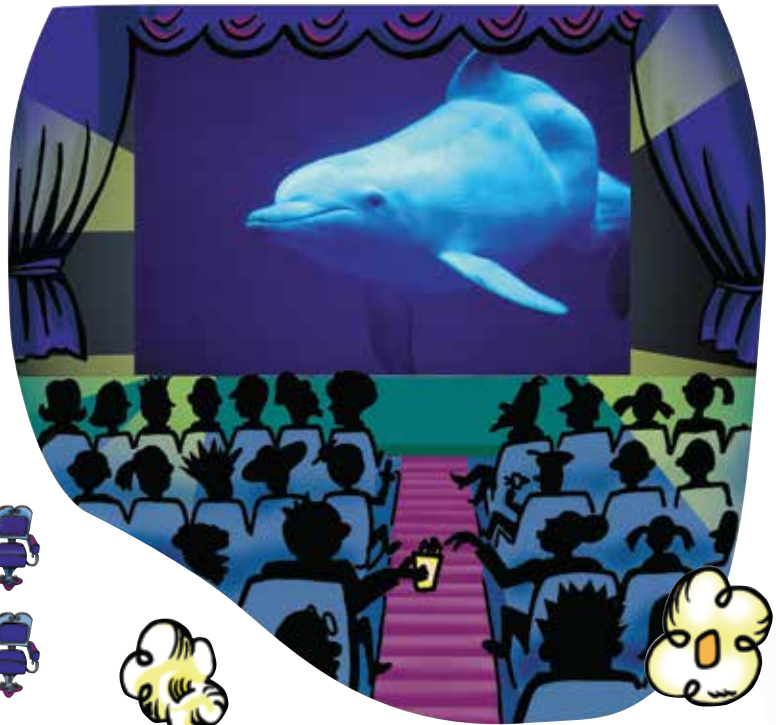
3×6



2×9



1×18



1. For the following numbers of people, how many different combinations of equal rows can you make with more people in each row than the total number of rows in the block?

a. 24 b. 32 c. 27 d. 64 e. 50 f. 48

2. How many different combinations of equal rows can you make out of 48 people if the rows can be any length?

3. a. If everyone in your class went to the movies, what equal-sized rows could they sit in?

b. What if the class next door went to the movies with your class, too?

4. Make up a similar problem for a classmate to solve. Use a different context, such as plants in a garden or chocolates in a box.

