

ROUGH DRAFT

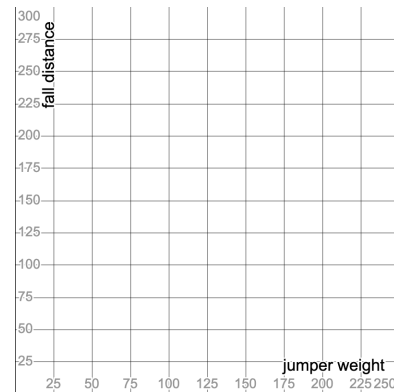
Multiple Representations of Functions

1. A rival bungee jumping business, Better Bungees, did their own mathematical research on the safety of bungee cords. They concluded that the following rule could be used to represent the total fall distance (d , in feet) based on a jumper's weight (w , in pounds):

$$d = 100 + 0.5w$$

Use their rule to **build a table and graph** that shows the relationship between jumper weight and total fall distance.

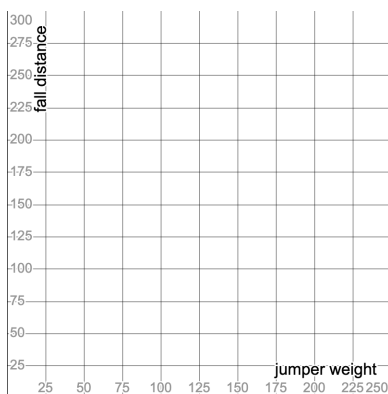
Jumper Weight	Fall Distance



2. A third rival bungee business, Best Bungees, also did some of their own research. They found the provided information relating jumper weight to total bungee stretch.

Jumper Weight	Fall Distance
50	175
100	200
150	225

Use their table to **build a graph and rule** that shows the relationship between jumper weight and total fall distance.



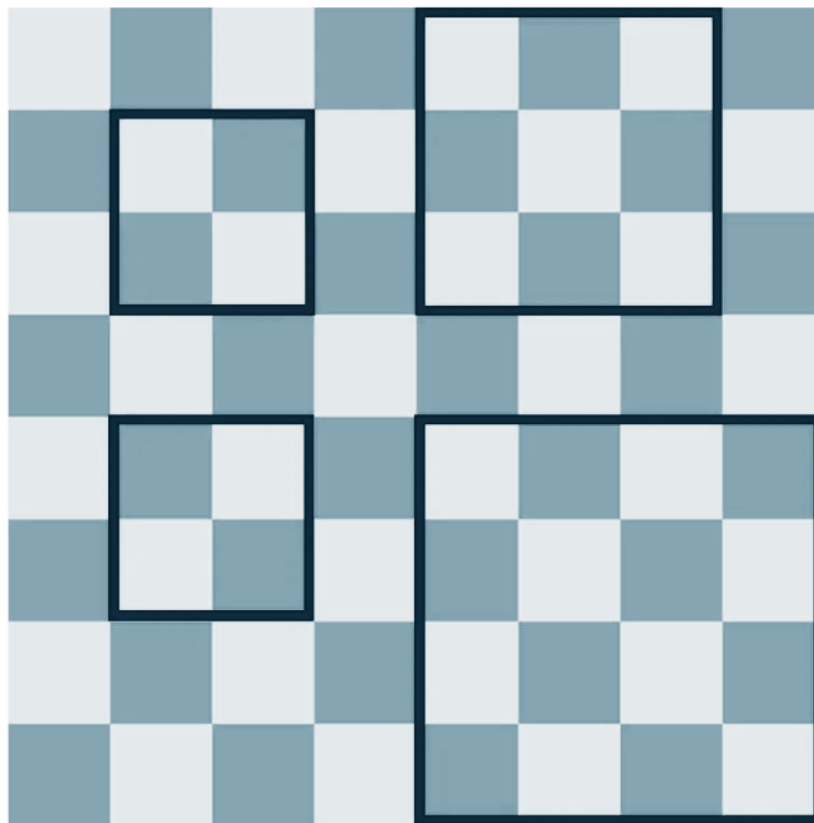
A rule to describe this relationship is:



PUZZLE OF THE WEEK

How Many Squares?

A typical 8x8 chess or checker board is made up of 64 'unit squares' (squares that are 1x1).
But, we can also see squares that are 2x2, 3x3, 4x4, etc.



How many **total squares** (of all sizes) are there on the 8x8 board?

WHAT IF...

... the board is 10 by 10? Or 25 by 25? Or n by n ?

... the board is rectangular! Say, 4 by 6? Or 7 by 15? Or n by m ?

... we counted the total number of rectangles on the 8 by 8 board instead of squares?

... we counted the total number of rectangles on the n by m board?