

Discover: Minimizing the Perimeter of a Rectangle

1. Open Office Spreadsheet application from application window.

Instructions

- Set up a spreadsheet such as the one shown below.

Width	Length	Perimeter	Area
1			225
2			225
			225
			225
			225

- Enter the length values. The area is constant, 225 m².
- Calculate the length by programming the length column using Length = Area / Width. In spreadsheet terms, this formula would look like: =D2/A2.
- Calculate the perimeter by programming the perimeter column using $P = 2*(l+w)$. In spreadsheet terms this formula would look like =2*(A2 + B2).
- You can quickly identify the Minimum Perimeter by scrolling through the values in the Perimeter column of the spreadsheet.
- Create a graph perimeter vs width.
- Write conclusion about the dimensions of a rectangle with minimum perimeter for the given area.
- Create a problem about finding minimum perimeter for the given area.