

Enlarging a picture using a grid. Math meets art

Directions:

Use a ruler to draw a grid of one inch squares on a 12 inch by 18 inch piece of drawing paper. Start by making marks every inch using a ruler along the top and bottom of the paper and connecting the marks with a ruler. Then do the same thing along the sides of the paper. When you are done your paper should be entirely covered with a grid of one inch squares. The grid should be 18 squares across and 12 squares high.

Next, take a look at the picture below. You will be enlarging and transferring this picture to the grid you have just made. Every single square in your new picture should correspond exactly to a smaller square in the picture below. So if a square is empty below it should be empty in your new picture. If a square in the picture below has part of an eye in it, then the corresponding square in your picture should have the same thing in it, only larger.

Some tips to insure accurate drawing:

Number the squares lightly in pencil along the bottom and side of your picture to correspond to the numbers in the grid below so that you do not get confused.

Always make sure, by counting, that you are drawing in the correct square so that you don't throw your entire drawing off.

Draw your picture lightly in case you need to erase.

When you are done your finished drawing should be an enlarged, precise duplicate of the picture below.

