

## Algebra/Geometry: Technical Writer

### Micron Technology, Inc

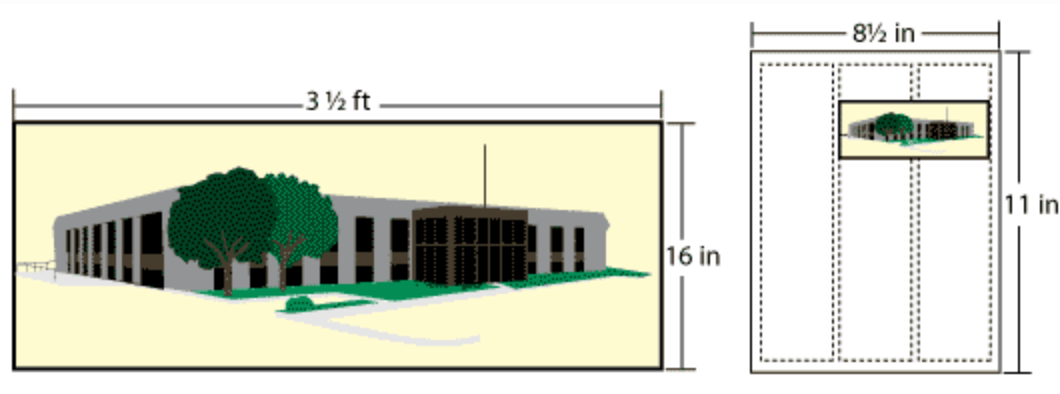
**Job Description:** Responsible for writing content, editing, and formatting the corporate newsletters as well as working with various departments and outside agency to produce the Annual Report.

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### Problem:

The latest issue of the company newsletter needs to include an architect's rendering of the new facility. The drawing (which will be scanned by the printer because it is too large for the in-house scanners) is  $3\frac{1}{2}$  feet wide by 16 inches high. In preparing the newsletter for the printer, however, the writer must create a placeholder in the newsletter for the drawing.

The writer wants the graphic to lay across 2 of the 3 columns of text. The newsletter is a standard  $8\frac{1}{2}$  by 11 inches format, with  $\frac{1}{2}$ -inch margins all around and  $\frac{1}{4}$ -inch "gutters" between columns. What should the measurements be for the placeholder? What is the percent of reduction?



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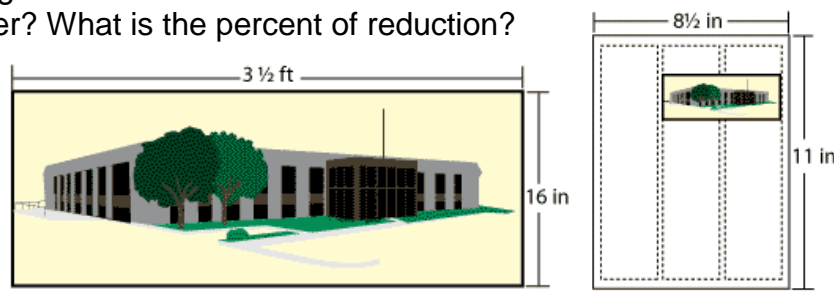
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### Problem:

The latest issue of the company newsletter needs to include an architect's rendering of the new facility. The drawing (which will be scanned by the printer because it is too large for the in-house scanners) is 31/2 feet wide by 16 inches high. In preparing the newsletter for the printer, however, the writer must create a placeholder in the newsletter for the drawing.

The writer wants the graphic to lay across 2 of the 3 columns of text. The newsletter is a standard 8 1/2 by 11 inches format, with 1/2-inch margins all around and 1/4-inch "gutters" between columns. What should the measurements be for the placeholder? What is the percent of reduction?



### Solution:

Paper width - margins - gutters  $\div$  3 columns = **Column Width**

$$8 \frac{1}{2} - (2 \times \frac{1}{2}) - (2 \times \frac{1}{4}) = 7 \div 3 = 2 \frac{1}{3} \text{ inches wide}$$

2 columns + gutter = **Image Width**

$$(2 \times 2 \frac{1}{3}) + \frac{1}{4} = 4 \frac{2}{3} + \frac{1}{4} = 4 \frac{11}{12} \text{ or } 4.916 \text{ inches wide}$$

Reduced size  $\div$  Original Size = **Percent Reduction**

$$4.916 \text{ inches} \div (3.5 \text{ ft} \times 12 \text{ in}) = 11.7\% \text{ reduction}$$

Original Height  $\times$  Percent Reduction = **Image Height**

$$16 \text{ inches} \times 11.7\% = 1.87 \text{ inches High}$$