Modeling Percentages
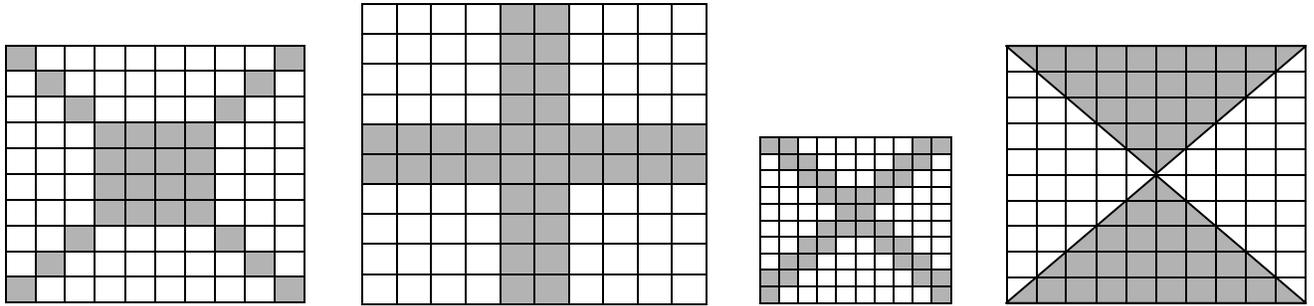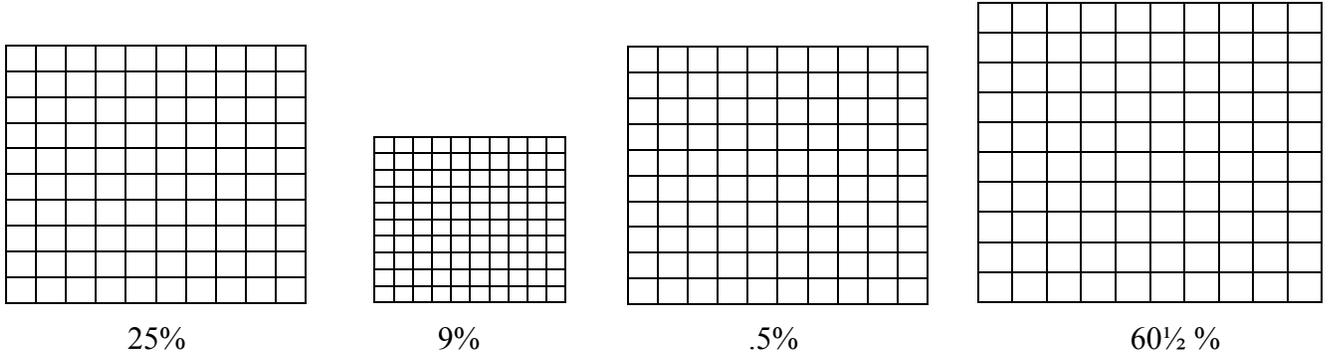
1   Determine what percentage of each grid is shaded.

2   Shade the indicated percentage of each grid.

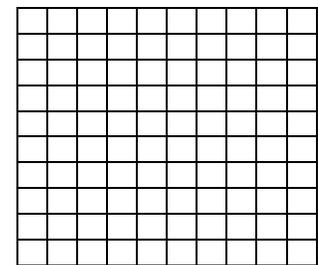25%   9%   .5%   60½ %

3   Suppose the grid shown here has a value of $300 and this value is distributed evenly among the small squares. Record your methods of determining the following:

$300

a   What is the value of 10 small squares?

b   Shade and determine the value of 15% of the grid.

c   What is the value of 87.5 small squares?
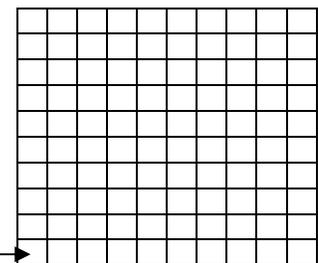
4   Suppose each small square on this grid has a value of $1.60. Record your methods of determining the following:

a   What is the value of the whole grid?

b   How many small squares would have a value of $56?

**c** $56 is what percent of the whole grid? $1.60

d What is the value of 90% of the whole grid?

5 Suppose the shaded part of this grid has a value of $315 and this value is spread evenly among the shaded squares. Show your methods and reasoning for each of the following:

a What is the value of 1 small square?

$315

b What is the value of the whole grid?

c $315 is what percent of the whole grid?
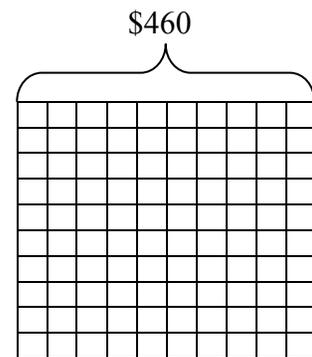
**d** What is the value of the unshaded part of this grid?

$460
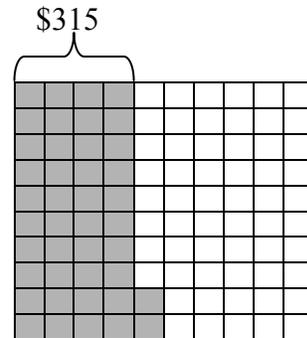
6 Suppose the following grid has a value of $460 and this value is spread evenly among the small squares. Show your methods and reasoning for each of the following:

a What percent of the grid would have a value of $345?

b What is the value of 27% of the grid?

7 Problems a through c below refer to the following line segment. Record your methods of determining each answer.

X   Y

A   B
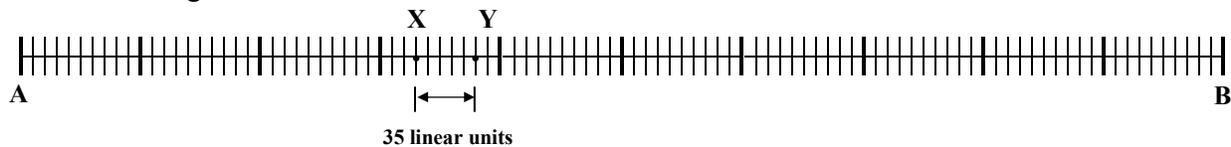
35 linear units

a What is the total length of segment AB?

b How long is 17% of segment AB?

c What percent of AB is 35 linear units?