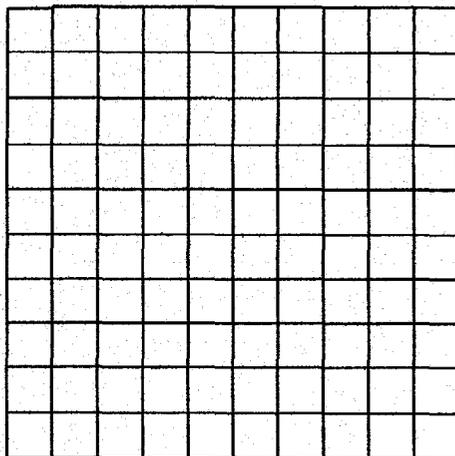
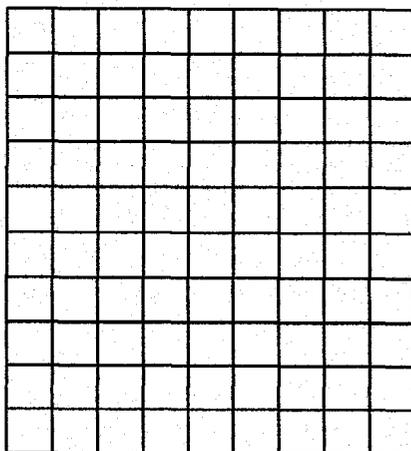


Given Whole and Percent, Find Part

PART-WHOLE RELATIONSHIPS



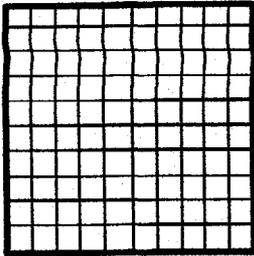
This is one 10 x 10 square grid. How would you shade 50% of this grid?
How many squares are shaded?



How would you shade 5% of the grid? How many squares are shaded?

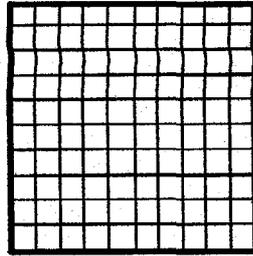
- Examples of other areas to shade 1%, 10%, 25%, 37%, $\frac{1}{2}$ of 1%, and so on.
You may want to extend to: $\frac{1}{2}$ of 10%, $\frac{1}{2}$ of 80%, $\frac{1}{4}$ of 4%, 200%, and so on.

Shade the amounts listed below and then name the decimal.



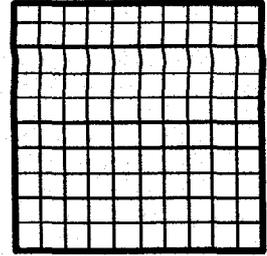
Shade: 4%

Decimal: _____



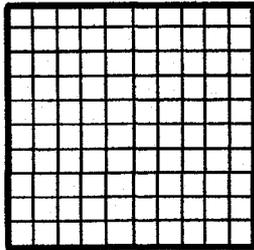
Shade: 40%

Decimal: _____



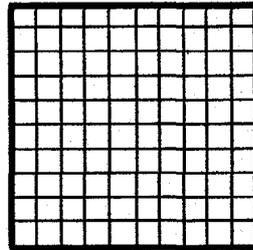
Shade: 25%

Decimal: _____



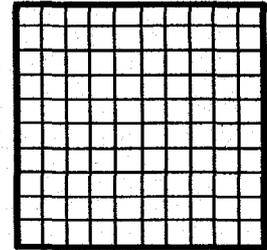
Shade: 10%

Decimal: _____



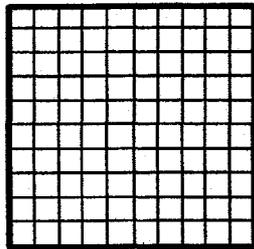
Shade: 1%

Decimal: _____



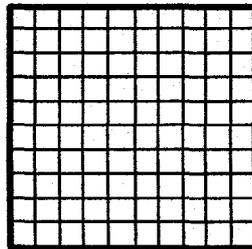
Shade: $\frac{1}{2}$ of 1%

Decimal: _____



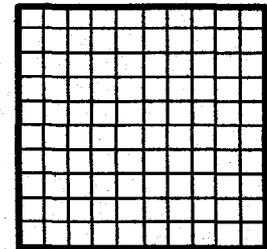
Shade: $\frac{1}{2}$ of 10%

Decimal: _____



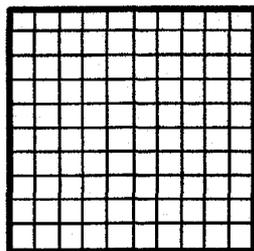
Shade: 5%

Decimal: _____



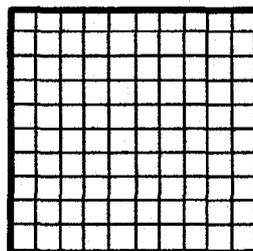
Shade: 44%

Decimal: _____



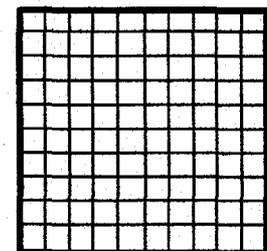
Shade: $\frac{1}{2}$ of 44%

Decimal: _____



Shade: $\frac{1}{4}$ of 44%

Decimal: _____

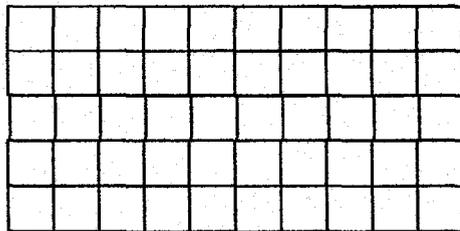


Shade: 11%

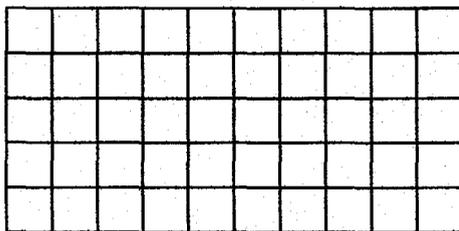
Decimal: _____

Application - Given Whole and Percent, Find Part

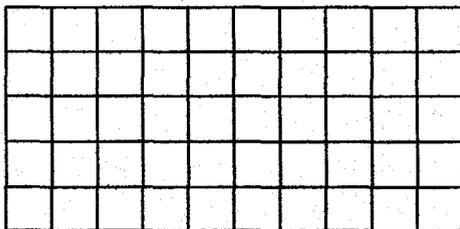
Sometimes the whole is not represented by 100 squares. The grid below illustrates fifty one-dollar bills. That is all the money I had when I went shopping - it was the whole amount. The 50 squares represents 100% of the money I had before I went shopping.



- I spent 50% of this money at the grocery store. Shade in 50%. This represents \$_____ out of \$50.



- I spent 30% at the bookstore. Shade in 30%. This represents \$_____ out of \$50.

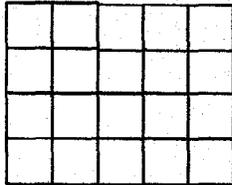


- I spent 20% of this money at the cleaners. Shade in 20%. This represents \$_____ out of \$50.
- How much money did I spend altogether? What percent of the \$50 did I spend?

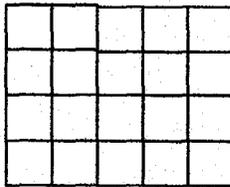
Application - Given Whole and Percent, Find Part

The squares in the grid below represent the 20 dogs at the local dog show.

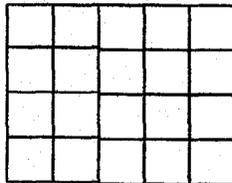
1. At the show 25% of the dogs belong to the toy breed. Shade in 25% of the grid. How many dogs are of the toy breed? _____ dogs out of 20



2. The dogs that weigh over 40 pounds represent 60% of the dogs at the show. Shade in 60%. How many dogs weight over 40 pounds? _____ dogs out of 20



3. The percentage of dogs that are new to this dog show is 10%. Shade in 10%. How many dogs is this? _____ dogs out of 20



4. Seventy-five percent of the dogs are less than 5 years old. Shade in 75%. How many dogs is this? _____ dogs out of 20

