

**Math 4b**

If 10% of a number is 12, the number is  $\frac{100}{10} \cdot 12 = 10 \cdot 12 = 120$

By dividing 100 by 10 we can find how many times 10% fits into the 100%, and then we have to take 12 these many times.

Or if 10% of a number is 12, the number is  $\frac{12}{10} \cdot 100 = \frac{12 \cdot 100}{10} = 120$

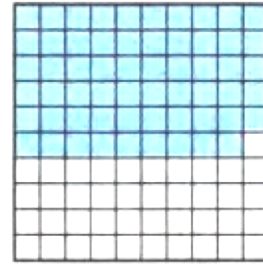
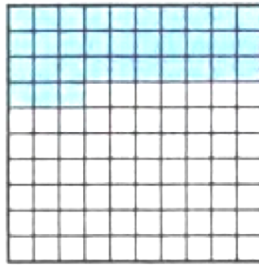
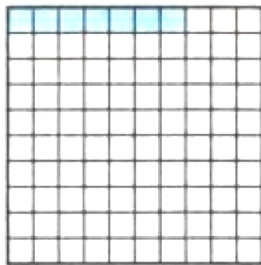
By dividing 12 by 10 we can find what is 1% of a number we are looking for, and then we have to take 100 of such 1%.

If 1% of a number is 2, the number is  $\frac{100}{1} \cdot 2 = 200$  or  $\frac{2}{1} \cdot 100 = 200$

If 3% of a number is 24, the number is  $\frac{100}{3} \cdot 24 = \frac{24}{3} \cdot 100 = \frac{24 \cdot 100}{3} = \frac{8 \cdot 100}{1} = 800$

**Homework**

1. What percent of each square is shaded on the picture below?



2. Find a number, if

1% of it is 3;

20% of it is 12;

15% is 150;

3% of it is 24;

200% of it is 400;

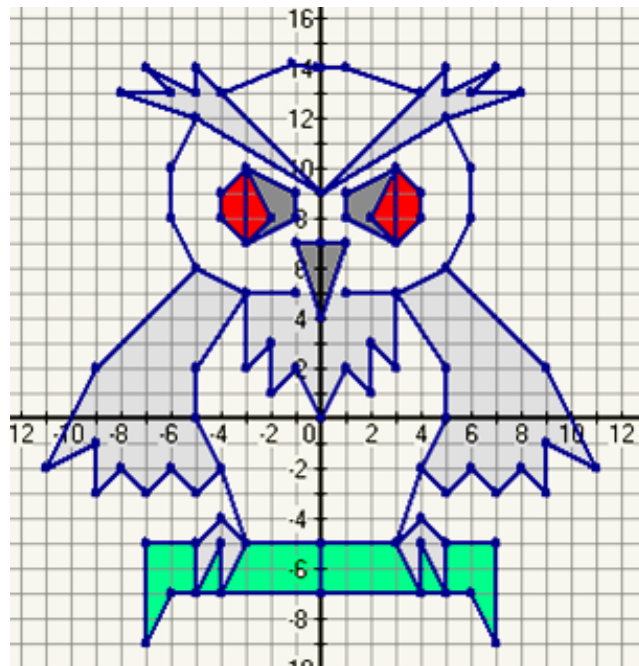
100% of it is 0.1;

50% of it is 1;

25% of it is 30;

3. Write an expression to find a number, if 4% of it is equal to **b**.  
Find the numbers for which 4% is equal to 8, 12, and 55.

4. Redraw the picture below by coordinates. Use graph paper! You don't need to color it, but you can, if you want to!



5. A baby beaver ate 12g of food, which is 30% of its weight. How much does the baby beaver weigh?
6. Tourists passed 20% of the route, which was 28 km. How many miles do they have left?
7. To do her homework, Julia solved math problems, wrote an essay, and did a history project. It took her 2 hours and 15 minutes to finish all the assignments. The ratios of the times she spends doing math, writing the essay, and doing history project are 3:2:1. How much time did she spend for each of her subjects?