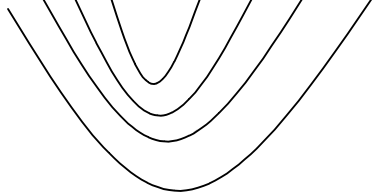


## Percentage of a Whole Number 2c

Since we know that the % sign means 'in every hundred' we can use the factors of 100 to help us calculate percentages quickly. Let's look at the factors of 100.

Factors of 100: 1, 2, 4, 5, 10, 20, 25, 50, 100



Notice how the factors of 100 pair up.  $1 \times 100$ ,  $2 \times 50$ ,  $4 \times 25$ ,  $5 \times 20$ . 10 of course has no pair since  $10 \times 10 = 100$ . We can use this knowledge of factors to calculate some percentages quickly and easily.

Example: Find 50% of the number 840. How do we find 50% of something? Look at the pair of 50 in our factors of 100. Its pair is two. So we divide our number by two.  
 $50\% \text{ of } 840 = 840 \div 2 = 420$

But what about 43% of 840?

43 is not a factor of 100 but we can use a 2 step method to find this percentage.

First find 1% of 840 by dividing it by 100.  $840 \div 100 = 8.4$

Then multiply this answer by 43.  $8.4 \times 43 = 361.2$  So 43% of 840 is 361.2

### **You MAY use a calculator for these.**

Look at the problems below and see if you can calculate the answers using the 2 step method.

1. 43% of 830 = \_\_\_\_\_

2. 63% of 360 = \_\_\_\_\_

3. 51% of 132 = \_\_\_\_\_

4. 24% of 351 = \_\_\_\_\_

5. 67% of 325 = \_\_\_\_\_

6. 56% of 740 = \_\_\_\_\_

## **ANSWERS**

1.  $43\% \text{ of } 830 = 830 \div 100 \times 43 = 356.9$

2.  $63\% \text{ of } 360 = 360 \div 100 \times 63 = 226.8$

3.  $51\% \text{ of } 132 = 132 \div 100 \times 51 = 67.3$

4.  $24\% \text{ of } 351 = 351 \div 100 \times 24 = 84.2$

5.  $67\% \text{ of } 325 = 325 \div 100 \times 67 = 217.7$

6.  $56\% \text{ of } 740 = 740 \div 100 \times 56 = 414.4$