

# Subtracting by 5

This is a special case.  
Subtracting by 5 is extremely easy!

If we need to subtract from a number which is over 5  
it is "easy":

$$\begin{array}{r} 87 \\ - 5 \\ \hline 82 \end{array}$$

We don't change the tens digit at all.  
We don't need to.  
The subtraction is all done in the units column:

$$7 - 5 = 2$$

is a well-known fact.

So if the number we are taking 5 away from ends in  
5, 6, 7, 8 or 9  
we don't have a problem.

## Subtracting Below Zero

As usual, the problem arises when we need to subtract  
from a smaller number.

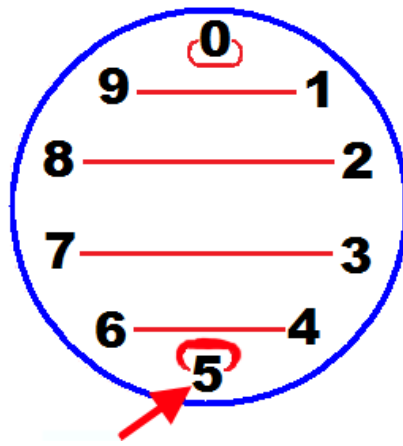
For example:

$$\begin{array}{r} 81 \\ - 5 \\ \hline 76 \end{array}$$

We can't take 5 off 2  
We need to use the "Add a Complement" method.

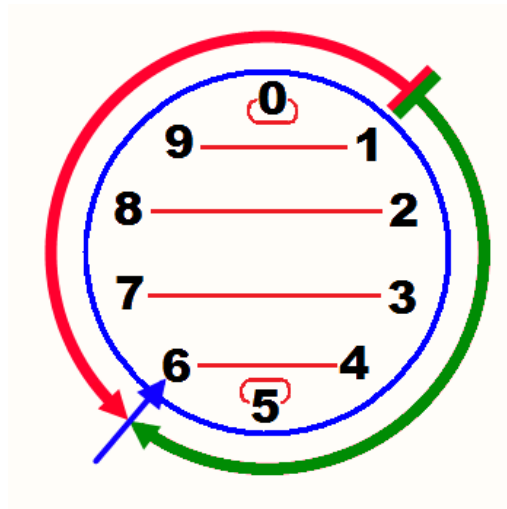
1. Drop the tens digit by 1 (from 80 to 70 "something")
2. Add the complement of 5 to the 1

But this is where the magic comes in!  
The complement of 5 in a 10-circle **IS 5** (see below):



*The complement of 5 is 5 in 10-circle*

We can see it this way in the circle:



In 10-circle

$$1 - 5 = 1 + 5$$

as you can see above.

It doesn't matter which way you go!

They both come to 6.

So it doesn't matter  
if you ADD 5  
or TAKE 5 OFF!

The simple rule to subtract 5 is:

If you can take it off easily do so.

If it "won't go" then:

(a) Reduce the tens

(b) Add 5 on instead!

**Example 1:**

$$\begin{array}{r} 96 \\ - 5 \\ \hline 91 \end{array}$$

*method used:  
just take 5 off 6 leaving 1*

**Example 2:**

$$\begin{array}{r} 73 \\ - 5 \\ \hline 68 \end{array}$$

*method used:  
can't take 5 off 3  
so  
Drop from 70 to 60  
Add 5 to 3 instead to get 8*

**Try Some Yourself:**

*Exercise 1*

<b>78</b>	<b>91</b>	<b>52</b>	<b>26</b>	<b>13</b>	<b>69</b>
<b><u>- 5</u></b>	<b><u>- 5</u></b>	<b><u>- 5</u></b>	<b><u>- 5</u></b>	<b><u>- 5</u></b>	<b><u>- 5</u></b>

*Exercise 2*

<b>47</b>	<b>62</b>	<b>24</b>	<b>80</b>	<b>36</b>	<b>53</b>
<b><u>- 5</u></b>	<b><u>- 5</u></b>	<b><u>- 5</u></b>	<b><u>- 5</u></b>	<b><u>- 5</u></b>	<b><u>- 5</u></b>

# ANSWERS

## Exercise 1

<b>78</b>	<b>91</b>	<b>52</b>	<b>26</b>	<b>13</b>	<b>69</b>
<b><u>- 5</u></b>	<b><u>- 5</u></b>	<b><u>- 5</u></b>	<b><u>- 5</u></b>	<b><u>- 5</u></b>	<b><u>- 5</u></b>
<b>73</b>	<b>86</b>	<b>47</b>	<b>21</b>	<b>08</b>	<b>64</b>

## Exercise 2

<b>47</b>	<b>62</b>	<b>24</b>	<b>80</b>	<b>35</b>	<b>53</b>
<b><u>- 5</u></b>	<b><u>- 5</u></b>	<b><u>- 5</u></b>	<b><u>- 5</u></b>	<b><u>- 5</u></b>	<b><u>- 5</u></b>
<b>42</b>	<b>57</b>	<b>19</b>	<b>75</b>	<b>30</b>	<b>48</b>

Isn't that easy!

