

HelpfulLockPicker's: How To Decode Dial Combination Locks

Step 1: Finding The Sticky Number

This is the first step. To find the sticky number you need to turn the dial clockwise around 3 times, pull tension on the shackle (a medium tension) and turn the dial clockwise until you find a number that sticks (it is best to do this with your eyes closed). Once you find the number where it starts to stick, write it down. It is a number where you start to meet resistance and you almost feel like you need to push past a hump to get through it.

**** Note:** This is the hardest number to decode and it is also the most important. If you get this number incorrect it will throw off the remainder of the steps. The best thing you can do is try to find the number that you get most consistently and that is often it.

How much tension do you need? Pull on the shackle hard until you seize the whole lock, reduce tension until you can start to turn the dial clockwise freely.

Now We Are Going To Use An Example Lock

Sticky Number = 3

Write This Down!

Step 2: Finding The Guess Numbers

**** Please Remember** the dial only has numbers 0-39 and when you cross over from 39 it goes back to 0 and not 40.

Guess Number (0-11)

The guess numbers fall from 0 to 11, now you need to set the dial to 0, apply heavy tension (more than what you did for the sticky number) and turn the dial **counter clockwise** until it stops. You will need to find two numbers, one even and one odd.

When the dial stops and if you can turn it back and forth between two half numbers the number in the middle is your guess number. If your number falls on two exact numbers keep going.

In This example it landed on: 39.5 and 0.5 and 2.5 and 3.5

The numbers in the middle are your guess numbers. Write Them Down!

Our Guess Numbers Are: 0 and 3

Step 3: The Math

Part A: Finding The First Digit To Our Combo

Add 5 to your sticky number and that is the first number to the combination

$$\underline{3} + 5 = 8$$

Part B: Finding The 3rd Digit To Our Combo

Next we are going to find the two possibilities to our last number

Take your first number to the combo and divide it by 4 and note the remainder.

$$\underline{8} / 4 = 2 \text{ with remainder of } 0.$$

Remember the remainder is 0.

Next, take your two guess numbers and add 10 three times

$$0 \quad 10 \quad 20 \quad 30$$

$$3 \quad 13 \quad 23 \quad 33$$

Now, divide each number by 4, if the number has a remainder equal to the remainder you found earlier (remainder of 0) it is a possibility.

$$0 / 4 = 0 \text{ Remainder } 0$$

$$20 / 4 = 5 \text{ Remainder } 0$$

0 and 20 are two possibilities for your 3rd digit to the combination.

** Optional Step** Tension the shackle and turn clockwise go to the two numbers you found, the one that feels looser is likely the correct number. This will leave you with only 8 possibilities!

So, up to this point we have found the first digit (8) and the last digit to our lock (0).

Part C: The Second Digit To Our Combo

Time To Find Our 2nd Digit. This will give us 8 possibilities.

**** Warning: This may not make sense but this is what to do and not why it works.****

So, take your remainder from earlier, we had Remainder = 0 and add 2

$0 + 2 = 2$ Take this number and add 8 to it 4 times (if you go over 39 it goes back to 0, ex $41 = 1$)

2 10 18 26 34

Now take the previous number (the remainder of $0 + 2$) and add 4 to it

$0 + 2 + 4 = 6$ and add 8 to this number 4 times

6 14 22 30 38

But WAIT, you said there were 8 possibilities, I see 10!

The 2nd and 3rd number can not be within 2 of each other and this eliminates 2 possibilities!

So lets RECAP. Now we have the 1st digit = 8, the 2nd digit with 8 possibilities, and the 3rd digit with two possibilities but through testing it is likely 0 (it felt looser)

So here are our possibilities

Most likely because we tested the last number and it was looser

1st digit: 8

2nd digit: ~~2~~ 10 18 26 34 6 14 22 30 ~~38~~

3rd digit: 0

Alternate Possibility

1st digit: 8

2nd digit: 2 10 ~~18~~ 26 34 6 14 ~~22~~ 30 38

3rd digit: 20

Step 4: Testing It Out

The final step is to test it out. If it does not work ensure your were operating the lock correctly: right, left (passing the second number once), right.

The sticky number is the hardest number to find, recheck all your numbers and keep trying!

The combo to this lock was 8-18-0