Learning pi
to 35 decimal places
3.14159 26 5358 9793 2384 6264 3383 2795 0288

The key to learning all 36 digits is to break them up into smaller chunks of numbers. In this worksheet set, I've broken up pi into 9 number chunks, most of which are 4 digits long. You'll start by learning each number chunk individually; then you'll work on putting the numbers in order.

Directions

1. Print out the flashcards and cut them into individual cards. You'll want to print out the flashcards (pages 3 and 4) onto two sides of one sheet of paper.

2. Group the cards together, so that each group starts with the same digit. (See **Figure 1** on the Memory Helps page). Note that only the "2" and "3" groups have more than one number chunk in their group.

3. Read through some of the memory tips (see **Figure 3** on the Memory Helps page) to help you remember the number chunk on each individual card. Some numbers won't have memory helps, but you can make up your own simply by noticing if any of the digits are repeated, if they're odd/even, if they're consecutive or skip numbers, etc. Some of the memory tips help you remember the order of the number chunks as well.

4. Using the back side of the flashcards (with only one digit showing), try to recite each number chunk by memory. For the digits 2 and 3, the words 'first', 'second', and 'third' simply indicate whether it's the first, second, or third occurence of the number chunk in order. For example, "3 first" would mean 3.14159 because that's the first number chunk that begins with 3, and "2 third" would mean 2795 because that's the third number chunk that begins with 2.

5. Put the flashcards in order, in three rows of three, as shown in **Figure 2**. Pi is read from left to right in each row.

6. With the cards still laid out in rows, try reading pi from beginning to end. After a few readings, turn over or remove one flashcard (removing the flashcard completely prevents you from seeing the first digit of that number chunk). Continue until you can recite pi to 35 decimal places completely from memory.
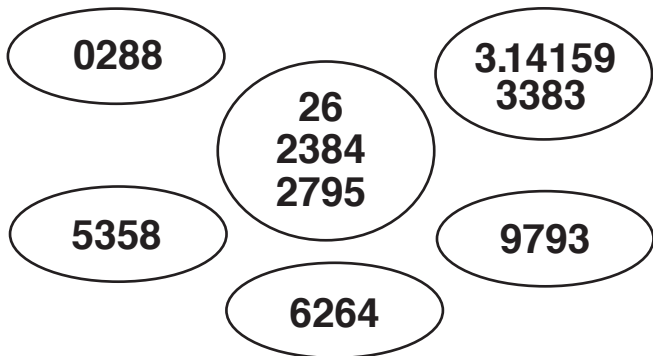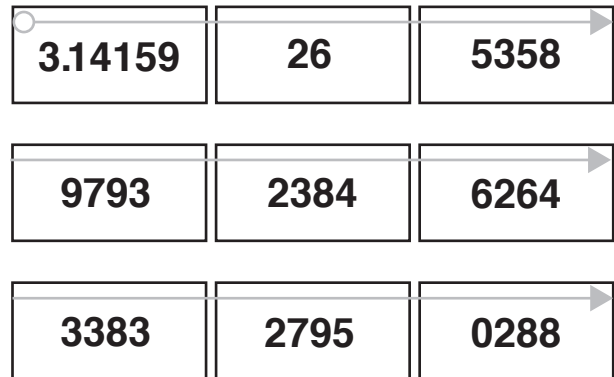
Memory Helps

0288

26
2384
2795

3.14159
3383

5358

9793

6264

3.14159	26	5358
9793	2384	6264
3383	2795	0288

·············· all 6 of these chunks have repeated digits

3.14159 → notice the consecutive numbers 14 and 15

26 → remember that 26 if followed by 5358 because 26 **ends** in 6 and the next number 5358 **begins** with 5 — it's counting backwards from 6 to 5.

5358 → 5 is repeated; think of adding a couple lines to 3 of 53 to turn it into 58

9793 → 9 is repeated; 9793 is all odd numbers; maybe think of the year '97; to remember that 5358 and 9793 follow each other, think 5' 9", (the first digit of each chunk) which might be the height of your mother.

2384 → think of consecutive 23…4 with an 8 in the blank; 3 and 8 always seem to go together with pi

6264 → 6 is repeated, the 2 in 62 is doubled to make 64

3383 → 3 appears 3 times; the third three easily turns to 8; to remember 6264 and 3383 follow each other, think 6' 3", (the first digit of each chunk) which might be the height of your father.

2795 → think of 2795 as a price, $27.95

0288 → 8 is repeated, so really there are only 2 digits to remember here, not couting the zero, all of which are even. (Personally, I think of February 1988 (02/88), which is when my niece was born.)

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π

3.14159

26

5358

9793

2384

6264

3383

2795

0288

3
first

5

2
first

2
second

9

3
second

6

0

2
third