## **Tech News**

## Today is Chinese New Year

Today begins the Year of the Rat, which Wikipedia says "is associated with aggression, wealth, charm, and order, yet also associated with death, war, the occult, pestilence, and atrocities." The Chinese

character for "rat" is the same as the one for "mouse", so if you'd rather celebrate the beginning of the Year of the Mouse, feel free to do so. (Picture copied from http://art.paradoxx.dk/2004/Icarus\_the\_rat.jpg)

## Today is e-day

Today is *e*-day, which celebrates Euler's number, the base for natural logarithms, whose value is approximately 2.71828182845904523536. There is a lot of beautiful mathematics involving *e*, involving calculus, probability, compound interest, trigonometry, complex numbers, irrational numbers, and other cool stuff. (See the wikipedia article on *e*.)

Perhaps the simplest *e* fact is

$$e = 1/0! + 1/1! + 1/2! + 1/3! + 1/4! + 1/5! + \dots$$
 that is

$$e = 1 + 1 + 1/2 + 1/6 + 1/24 + 1/120 + 1/720 + \dots$$

The Wikipedia article on e has the following interesting trivia:

In contemporary internet culture, individuals and organizations frequently pay homage to the number e.

For example, in the IPO filing for Google, in 2004, rather than a typical round-number amount of money, the company announced its intention to raise \$2,718,281,828, which is e billion dollars to the nearest dollar. Google was also responsible for a mysterious billboard that appeared in the heart of Silicon Valley, and later in Cambridge, Massachusetts; Seattle, Washington; and Austin, Texas. It read {first 10-digit prime found in consecutive digits of e}.com. Solving this problem and visiting the advertised web site led to an even more difficult problem to solve, which in turn leads to Google Labs where the visitor is invited to submit a resume. The first 10-digit prime in e is 7427466391, which starts at the 99th digit.

In another instance, the eminent computer scientist Donald Knuth let the version numbers of his program METAFONT approach e. The versions are 2, 2.7, 2.71, 2.718, and so forth.

Watch for  $\pi$  day coming on March 14!

## Scratch now on XO

Scratch is now available on XO laptops (the One-Laptop-Per-Child project). If you have an XO laptop, you can download it from

http://wiki.laptop.org/go/Activities You will need to have Build 653 of the XO operating system, which is newer than the one that the give-oneget-one laptops shipped with. Go to

http://wiki.laptop.org/go/Olpc-update to find out how to update your version.



