

Numbers practice for computer engineers

Worksheet 1 – Questions about numbers

What numbers could you use to describe the products that your company deals with?

What numbers could you use to describe your job?

What questions would you ask to get the numbers you discussed above in response?

How would the questions which got these answers start?

Seventy seven kilos.

In ninety seventy five.

Forty eight kilobytes.

Three hundred and fifty eight dollars.

For sixteen weeks.

Seven foot three inches.

Once a week.

A thousand two hundred percent.

Write the numbers above as figures



Worksheet 2 – Pairwork
Student A

Choose one of the numbers below and turn it into a question. Your partner should guess the answer and then you should give them hints until they get it exactly right.

Useful language for giving hints

“No. It’s much much/ much (= a lot)/ quite a lot/ a bit (= a little)/ a tiny bit...
... bigger/ smaller/ higher/ lower/ longer/ more/ less/ earlier/ later (than that)”

1. The IBM RAMAC 305 in 1956 stored 5 megabytes of data and cost \$10,000 per megabyte.
2. A 90-minute compact cassette could store up to 1MB on each side. It would take 281 days to copy the data from one DVD on to cassettes.
3. The first floppy disk was 8 inches wide and could store 80kB.
4. The IBM 305 RAMAC could store up to 4.4 MB of data on fifty 24-inch magnetic disks. It cost \$3,200 a month to lease one from IBM.
5. In 1998, 9.4 billion e-mail messages were sent per day.
6. Experts estimate the web doubles in size every 8 months.
7. In 1981 Bill Gates said that 640kB of memory would be enough for anyone.
8. The Internet started in 1969 with four nodes (UCLA, the University of California-Santa Barbera, the Stanford Research Institute, and the University of Utah).
9. It would take about 6000 floppy disks to store the same as one DVD.
10. There were 18 million lines of code in Windows 98.
11. Douglas Englebart invented the computer mouse in 1963.
12. In 2005, 75 percent of Americans used the Internet and spent three hours a day online.
13. In 2003, spam was 60 percent of all e-mail and cost the American economy \$9 billion.
14. In 2003, there were 1.5 billion spam messages to AOL users per day and 7 million complaints a day from AOL customers about spam.
15. Spammers can send a million emails for about 500 dollars.
16. The cost of computer bugs for the US economy was estimated at \$38 billion a year in 2003.
17. The cost of hackers for the US economy was estimated at \$5.4 billion a year in 2003.
18. A new edition of Windows is worked on by 7,200 people, comes in 34 languages and has to work with 190,000 different devices.
19. The first patent for data storage was in 1884 (for the punch card)



Student B

Choose one of the numbers below and turn it into a question. Your partner should guess the answer and then you should give them hints until they get it exactly right.

Useful language for giving hints

"No. It's much much/ much (= a lot)/ quite a lot/ a bit (= a little)/ a tiny bit...
... bigger/ smaller/ higher/ lower/ longer/ more/ less/ earlier/ later (than that)"

1. Workers spend about 8.3 hours a week looking at non-work-related sites like Facebook.
2. The Hitachi Deskstar 7K500 was the first hard drive that could store 500 GB, approximately 120,000 times as much as the first hard drive.
3. The wavelength of the laser in a DVD is 780 nm. In a CD it is between 625nm and 650 nm.
4. You would need 90,000,000 punch cards to store the data on just one DVD.
5. The first hard drive that was able to store 1 gigabyte was the IBM 3380, launched in 1980. It weighed 550 pounds (250 kg) and could cost up to \$142,400.
6. The magnetic tapes used in the UNIVAC computer were each about 370 metres long.
7. 25% of employees say they are Internet addicts.
8. Spammers get about 25 responses for every one million spam emails that they send.
9. 11 million items are for sale on EBay at any time
10. 0.01% of all eBay listings are designed to defraud.
11. About 200,000 businesses sell only through eBay.
12. The game company EA (Electronic Arts) has 4,400 employees.
13. The Code Red virus infected over 300,000 computers in 14 hours and cost more than \$2,600,000,000.
14. In 2002, 54% of American schools relied on students to provide technical support for the their computers.
15. Hewlett Packard was founded in 1939. (Its first product was an oscillator).
16. The Harvard Mark 1 calculator, launched in 1944, was 50 feet long.
17. The 1946 ENIAC computer was 1000 times faster than competing computers.
18. The starting capital of Apple Computers was \$1300 (raised by selling a VW van and a scientific calculator).
19. Executives spend 108 minutes each day reading and sending e-mail
20. In 1943, IBM chairman Thomas Watson Sr. estimated the worldwide market for computers as "about five or six".
21. 12% of hacker attacks cause damage.

Answer key

Questions

- How heavy...?/ How much ... weigh?
- In which year...?/ When...?
- How much memory/ data...?
- How much... (cost)?
- How long...?/ How many weeks...?
- How wide...?/ How long...?/ How tall/ high...?/ How thick...?
- How often...?
- What percentage of...?/ How many percent...?

Numbers

- 77kg
- In 1975
- 48kB
- \$358
- For 16 wks
- Seven foot three inches. 7'3(")
- 1/ wk
- 1200%