

Calculating Haploid and Diploid Numbers

Haploid and diploid numbers are designated by the algebraic notations N and $2N$, respectively. Either number can be calculated when the other is known. For example, if the haploid number (N) is 3, the diploid number ($2N$) is 2×3 , or 6. If the diploid number ($2N$) is 12, the haploid number (N) is $12/2$, or 6.

The table shows haploid or diploid numbers of a variety of organisms. Fill in the missing haploid or diploid values.

Trait Survey

Organism	Haploid number	Diploid Number
Amoeba	$N=25$	
Chimpanzee	$N=24$	
Earthworm	$N=18$	
Fern		$2N=1010$
Hamster	$N=22$	
Human		$2N=46$
Onion		$2N=16$

1. In the table, which organisms' diploid numbers are closest to that of a human?

2. Why is a diploid number always even?

