

So finally the number is

$$(-1)^{145-1023} 2^{145-1023} (1 + 0.5703125)$$

2) Rounding and chopping

p^* approximates p to t significant figures if

$$\frac{|p - p^*|}{|p|} < 5 \times 10^{-t}$$

Rule of thumb:

1) When we round we keep t digits

Ex. Round 0.00375742 to 3 significant digits
0.00376

2) When we chop we have to keep $(t+1)$ digits

Ex. Chop 0.00375742 to 3 significant digits
0.003757