

Finding Precision from a Given Measurement

There are times when you have a measurement, but you cannot see the measuring tool that was used to get that measurement. In this case, you have to determine an assumed precision from the given measurement.

Example 2

Determine the precision used to arrive at each of the following measurements.

a) 17 years old
↑
"ones" (place value)
Precision is one (1), because the year is going up by 1 year.
 $P = 1 \text{ year}$

b) 23.5 pounds
↑
"tenth" (place value)
The precision = 0.1

c) 9.58 seconds (current 100m dash world record time)
↑
hundredths
→ the precision is 0.01 second

d) 17 569.8 cm
↑
"tenth"
Precision = $\frac{1}{10} \rightarrow$ 0.1 cm

the smallest place value is the .8
so the precision is 0.1 cm

NOTE: the smaller the precision, the more precise is the measurement.

- A precision of 0.01 second is more precise than a measurement of 1 second.