Pocket Watch Glass Sizes

I have a bunch of pocket watch crystals. They are all marked as follows: 21 4/16 22 4/8
What kind of measurement is this? And what kind of fractions? I spent too many hours learning to reduce fractions, and now I see not everyone does?

There are 4 different systems used to measure crystal diameters.

1. Three digit whole numbers:
   This is tenths of a mm
   Example: 487 = 48.7 mm

2. Whole number with 1/16 fractions:
   This is the common ligne system.
   1 ligne = 2.255883 mm.

   Example: 21 10/16 = 21 10/16 x 2.255883 = 48.7 mm.

3. Whole number with 1/8 fractions
   This is the ligne system where 0 = 10 lines and
   each full size increment = 1/2 ligne

4. Whole number with 1/4 Fractions:
   This system is not very popular.
   It is called the Lancashire or English System.
   In this system, 0 = 1 1/30 inches.
   Each full crystal size increment is 1/30 inch larger than the previous.
   For example, if the crystal is labelled 26 1/2:
   1 1/30 + (26 1/2 X 1/30 = 1.917 inches
   1.917 inches X 25.4 mm/inch = 48.7 mm.

(This is extracted from a Crystal Data Sheet produced by Hank & Marge Farrer)
Now you can see why this last system is hardly used anymore!

Your crystals use Method #2 and #3.

If it's too confusing, suggest that you re-measure your crystals in mm,
and re-label them using Method #1

Hope that this helps.

Mel Kaye