1) Thales: “arithmos is a collection of units” [Iamblichus Introductio Arithmetica p. 10]

2) Pythagoreans – “made number out of one” 985a20.

3) Chryssipus “multitude one”

4) Moderatus [neo-Pythagorean, 60 a.d.] arithmos “a progression of multitude beginning from a unit and a regression ending in it.” Stobaeus; Eclogae i. Proem. 8

5) Nicomachus “a flow of quantity made up of units”

6): “Number is that by which the quantity of each thing is revealed.” Simon Stevin

7) “An arithmos is a finite multitude...” Eudoxus

8) “limited multitude”. Aristotle, Metaphysics 1020a 30

9) “a set/system of units” μοναδῶν σωστήμα Domninus 413

10) “arithmos is always a multitude of indivisibles” πληθος αδιαιρετων. Aristotle; Metaphysics 1085b22

11) ‘an aggregate in the realm of quantity composed of monads’ Nicomachus. 13, 8

12) Aristotle “an arithmos signifies a measured plurality or a plurality of measures” [Metaphysics 1088a6]

13) Platonic Def of #: A property of a group that belongs only to the group, not the individuals, and applies to the group only insofar as the individuals are considered to be identical. [implied in Hip. Maj]

14) By number we understand not so much a multitude of unities, as the abstracted ratio of any quantity to another quantity of the same kind, which we take for unity" (Newton, 1728).

15) numbers are whatever are needed to make sure that every equation has a solution Alfred North Whitehead

16) Aristotle gives a few implied definitions of arithmos, but here are some passages from his writings that employ arithmos in a way that gives a deeper sense of what he means by the term:

Metaphysics Delta 13, 1020a8-14:

Quantity [poson, literally "how much" or "how many"] is said to be that which is divisible into constituents, each of which is by nature one [or "a one"] and a "this" [tode ti, a specific indicable thing]. A plurality [plethos] is a kind of quantity if it [the quantity] is numerable [countable; arithmeton]; a magnitude is a kind if quantity if it [the quantity] is measurable. A plurality is said to be that which is divisible potentially into parts which are not continuous; a magnitude, on the other hand, is that which is potentially divisible into parts which are continuous...Of these, a limited [peperasmenon] plurality is said to be a arithmos, a limited length a line, a limited width a surface, and a limited depth, a
Plurality is as if it were [or "such as"; hoion] a genus of arithmos; for arithmos is a plurality measurable by the one. And in some sense [or "in a way"] the one and arithmos [or "a arithmos"] are opposed, not as contraries, but...as some relative things are; for the one in so far as it is a measure is opposed to arithmos in so far as arithmos is measurable.

The one signifies a measure, evidently. And in each case there is some different underlying subject [hupokeimenon, thing laid down], such as in the musical scale a quarter-tone; in magnitude a finger or a foot or some other such thing; and in rhythm a beat or a syllable....And this is also according to formula [or "definition" or "account": logos]; for the one signifies a measure of some plurality and the arithmos signifies a measured plurality [a plurality that has been measured] and a plurality of measures. Therefore it is also with good reason that the one is not a arithmos; for neither is a measure measures, but a measure is a principle [or "source", arche], and so is the one.

Definitions of Unit

1] Pythagoreans: “one is not a # since a measure is not the thing measured” 1088a7
2] Thymarides: [Pythagorean 4th b.c.e.] unit as a “limiting quantity” Iamblichus 11-12
3] “an unitie is no number but the beginning and original of number.” Baker 1568
4] “...Ramus, and such that have written since his time, affirme not only that an unite or one, is a number, but also that evey fraction or parte of an unite, is a number...” Hylles 1592
5] “…unity alone out of all number, when it multiplies itself, produces nothing greater than itself...Unity, therefore, is non-dimensional and elementary.” Nicomachus 238
6] “[a] if from a number there is subtracted no number, the given number remains [b] if from 3 we take 1, 3 does not remain [c] therefore one is not ‘no number.’ Simon Stevin
7] Rabbi Ben Ezra Sefer ha-Echad (Book on Unity) (1140) first to entertain idea that one is a number
8] “Multiplicity is the genus of arithmos. Because of this arithmos and one are opposites.” Iamblichus [see also Aristotle Metaphysics 1056b 19ff]
9] “The one is the source of number” Metaphysics 1052b22ff.
10] Euclid v. 1 120 “…a unit is that which is indivisible in respect of quantity…”