1. Inductively vs. deductively reasoned ethics.

2. First principles underlying both theological and philosophical ethics

   a. in philosophical ethics, these often begin with logically necessary truths
   b. in theological ethics, these begin with revealed truths
   c. conflicting ethical arguments often derive from different sets of incompatible philosophical or theological first principles, and these are often manifest in incompatible premises.

   eg: People are inherently evil; therefore freedoms should be restrained by authority so that evil works can be avoided. vs. People are inherently good; therefore freedoms should be protected so that good works can be done without impediment.

3. Philosophical first principles are typically either induced from experience (the empirico-inductive method) or posited hypothetically with all other conclusions deduced from these hypothetically posited first principles (the hypothetico-deductive method).

   eg: Euclidian geometry which argues from ten assumptions: 5 ‘common notions’ (such as ‘things which are equal to the same thing are also equal to one another’); and 5 geometric postulates (such as ‘it is possible to draw a straight line from any point to any point.)

   Together, these common notions and postulates represent the axioms of Euclid's geometry. An axiom is a logical principle which is assumed to be true rather than proven, and which can be used as a premise in a deductive argument.

   Euclid's set of axioms, or axiomatic system, represents a collection of "first principles" from which other principles can be produced using deductive reasoning. Of course, any deductive arguments are only sound if Euclid's common notions and postulates really are true.

   a. Problem is: Relating the order of **necessary, immutable, unchanging logical implication** to the order of **contingent, changing, causal relation**—i.e., the order of ‘real things’ in the ‘real world’ which constantly changes.

   eg: $1 + 1 = 2$ vs. I smoke a cigarette, therefore I will get cancer

   This is still a philosophical problem today, and this separation was first suggested in pre-Socratic Hellenistic philosophy, and most thoroughly given in Plato.
b. Many systems of philosophical ethics entail both induction and deduction (utilitarianism; pragmatism). Every current approach has its roots in Hellenistic philosophy:

4. The Pre-Socratic Philosophers (good examples of hypothetico-deductive reasoning):

a. **Milesian School**: (7th-6th Centuries BCE) First thinkers to attempt to explain the relationship between change and permanence in nature; explanations in terms of conflict of opposites. (Good example of the hypothetico-deductive method).

Thales, Anaximander, Anaximenes.

b. **Pythagorean School** (6th-5th Centuries BCE). Unlike the Milesian thinkers whose first principles are rooted in conflict of opposites, for the Pythagoreans, all is harmonious. Harmony of music = harmony of universe. All things are numbers in purity. The Pythagoreans regarded numbers spatially: 1 = point, 2 = line, 3 = plane, 4 = solid. All bodies consist of points in space which together constitute number.

Objects are sums of points; numbers are sums of points; therefore, objects are numbers.

c. **Heracleitus of Ephesus** (540 – 480 BCE): ‘All things are in a state of flux.’ This is not the kernel of his philosophy, but it is a central idea. By saying that all things change, he is not saying that there is no reality, however. This is not the most important feature of his philosophy, though, since it is not novel (we saw it in other Ionian philosophers). The fundamental substance for Heraclitus is fire.

Interesting note: Buddha (Sidhartha Gautama) lived from 560-479 and espoused similar first principles.

d. **Eleatic School**: Parmenides = the likely founder of this school. Had a dialogue with Socrates in 451-449. Believed that Being, the One, is and that change or Becoming is an illusion. For if anything comes to be, it comes either out of being or non-being; if the former, then it already is; if the latter, then it is nothing, since only nothing can come from nothing.

**Plurality is then also an illusion.**

Rejects Pythagorean school because it embraces the concept of change. Introduces a duality of Truth vs. Appearance; or Reason vs. Sense. Makes explicit this distinction between Truth and Appearance, only implicit in other philosophies (Heraclitus, etc). The Eleatic School is one which espouses **monistic materialism**. Only reason—not sense—can apprehend the material and unchanging One. Despite this, he is often
called the father of ‘Idealism.’ This is wrong. He may have influenced the Idealism of Plato, but his true lineage goes down through Empedocles and Democritus.

e. **Empedocles of Akragas** (490 – 430) Akragas (Agrigentum) in Sicily. Amalgamated previous philosophies. Embraced Parmenides’ concept of material being without end, indestructible, etc. Nothing arises from nothing; something cannot arise out of nothing. But accounted for the experience of change, motion, and plurality via an atomist doctrine: Collections of atoms may come into and go out of being, but the atoms themselves do not. The Void is something, not nothing.

Empedocles invented the **classification of matter into the four classes: Earth, Air, Fire, and Water**. These cannot interchange. Objects come into being via the intermingling of the four elements, and cease to be via the separation of the elements. ‘Love’ and ‘Strife’ are the forces which drive these atomic interrelations.

Empedocles mediates the philosophy of Parmenides and the facts of sensory experience. (i.e., he employs both deduction from hypothetically posited first principles, as well as induction from sensory experience).

f. **The Atomist School**: Leucippus. (fl. 400 – 500) Member of the school of Parmenides, student of Zeno. Difficult to discern in this school between the works of Leucippus and Democritus; the latter came much later and was not a pre-Socratic.

Atomism is the logical development of the philosophy of Empedocles, who reconciled Parmedian changelessness with the evident change of matter, via elemental particles and the two forces Love and Strife. The Philosophy of Empedocles formed a transitional stage to the explanation of all qualitative differences by a mechanical juxtaposition of material particles in different patterns. (Love and Strife would have to be replaced by a more sensible mechanics.) All these mechanics were developed by the Atomists.

5. **The Sophists**: Empirico-inductive method. Practical. No “objective truth” and conclusions not meant to be treated as such.

‘Virtue’ became derived from the ability to win arguments and public approval, rather than from ‘truth’ as with the pre-Socratics.

a. **Protagoras** (485 – 410), came to Athens around 450. Pragmatic relativism. Believed in the value of an educated society; ethical tendencies in all people can only be brought out in an organized community; therefore a good citizen must absorb the whole social tradition of the community.

‘Man is the measure of all things,’
Controversy as to the exact meaning: Man as individual, meaning truth is individually relative; or Man as humanity. Also unknown whether the saying is to apply to objects only or objects and values.

An objection re: the objectivity of geometric shapes to all people was met by Protagoras with the rebuttal that there is no geometry in ‘concrete’ reality.

For Protagoras, the supposition that ideas of things correlate with the things in themselves is unwarranted. Protagoras held an ethical relativism, but valued according to practical benefit.

b. Gorgias of Leontini (483 – 375), of Leontini Sicily; came to Athens in 427. Pupil of Empedocles. Led to skepticism by the dialectic of Zeno, thus becoming a critic of the Eleatic School. Protagoras, along the Eleatic lines, holds that everything is true, while Gorgias holds the opposite: Nothing exists, A) since anything must either be 1. eternal, or 2. derived from nonexistence. Cannot be the latter, since only nothing comes from nothing; cannot be eternal, since the eternal must be infinite, and the infinite is impossible because the infinite cannot be in itself, and cannot be in something finite, so it must be nowhere and therefore nothing. B) Even if something existed, true knowledge of it cannot be imparted, since every sign is different than the thing which it signifies (cannot impart color via words, etc).

Sophism was valuable in that it introduced questions which illuminated the deficiencies of the pre-Socratic cosmologies; but it failed to introduce any constructive solutions. Eventually, Sophism became regarded negatively as relativistic Sophistry. Against this relativism, Socrates and Plato reacted, endeavoring to establish the sure foundation of true knowledge and ethical judgments.

6. Socrates (470 – 399) Socrates was focused on attaining universal definitions (contrary to the Sophists); Example: Aristotle’s concept of man as ‘rational animal’: All men are rational (universally); yet they vary in degree, type, etc. Universals (enduring, objective) vs. Particulars (fleeting, ‘subjective’)

We might be mistaken in thinking we GRASP the universal (universal ‘beauty’ for example); but we must admit that it exists. Applied to ethics: Relative justice of Sophism is replaced by the acknowledgment of a universal standard by which all particulars are measured in the same way that a universal (and necessarily abstract) standard of ‘straight line’ is applied to the measurement of all lines in practice.

a. Inductive arguments. But not via a sheer focus on logic, as with Aristotle. Socrates’ method was the dialectic which proceeded from a less adequate definition of a term or concept to a more adequate one, or from consideration of particulars to consideration of universals.
b. Driven to alleviate his own ignorance; discovery of what the ‘good life’ is via the discovery of truths such that universal standards of ethics could be had. Deeply convinced of the value of the soul, and knowledge of truth was the best way to tend the soul. Called his method ‘midwifery’ because the goal was to get his conversation partners to produce true ideas in their own minds, with a view to right action (right ethics.) This explains his emphasis on definition; not pedantic, but a genuine desire to ascertain the Truth clearly. True Ideas via the clear form of Definition for practical (ethical) rather than strictly theoretical purposes.

c. Desired to inspire people as he was inspired…to seek virtue through wisdom. ‘Look to the State itself before looking to the interests of the State.’ Xen, Memorabilia, I, I, 16; Apol, 36 To do this, we must know what a ‘good State’ is. **Knowledge is always a means to ethical action.**

d. **Ethics via knowledge, but ethics and knowledge are ONE.** One who ‘truly’ knows what is right cannot but ‘do’ what is right. That is the goal. Aristotle criticizes this Socratic identification of Knowledge and Virtue on the grounds that Soc forgot the irrational parts of the soul and the fact of moral weakness. One could counter that Soc would say that knowledge of a wrong during the commission of a wrong isn’t ‘True’ knowledge.

e. **From the identification of Virtue and Knowledge follows the unity of Virtue.** There is only one virtue—insight into what is truly good for man…what really conduces to is soul’s health and harmony. **Also, then, virtue is TEACHABLE,** since knowledge is teachable. This is Socratic intellectualism… as a doctor has learnt medicine, so a just man is one who has learnt what it is to be just. ‘Teaching’ was for Soc not lecturing, for in that case, you could teach someone what virtue IS without producing a virtuous person; Soc’s teaching involved self-discovery, and in that sense, it is understandable how virtue was thought to be teachable by Soc.

f. This is a view not favorable to democracy. States should be ruled by those who possess the requisite knowledge—and therefore the requisite virtue. If the sick are only reasonably entrusted to doctors who are knowledgable in medicine, then the state should only reasonably be entrusted to those who are knowledgable—not to the unknowing masses.