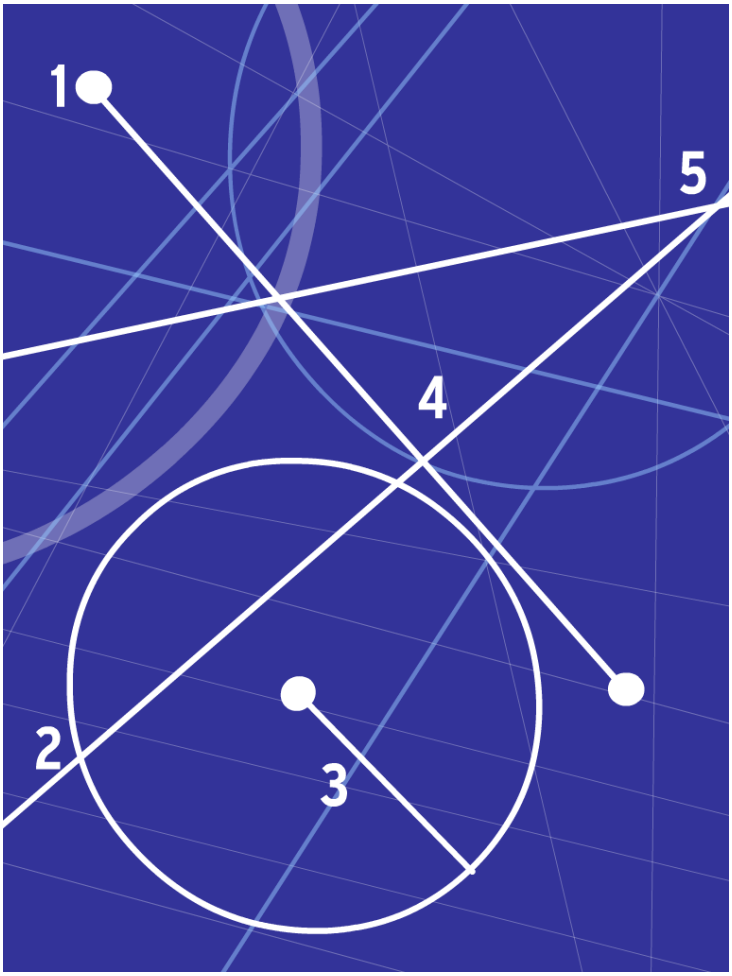
FYI Geometry

One of the coolest things about Euclidean geometry is that its entire logical structure is derived from five basic assumptions, called **postulates**. Learn them, and the rest of geometry will fall into place much more easily! They are:



- Any two points can be joined by a straight line segment.
- A straight line segment can be extended infinitely in either direction.
- A straight line segment of any length can be used as a circle's radius, with one endpoint serving as the circle's center.
- All right angles (an angle formed by two perpendicular line segments) are congruent (meaning they have the same angle in degrees).
- If two lines intersect a third line in a way that their inner angles add up to less than 180 degrees, those two lines will intersect on that same side, forming a triangle with the third line.

In addition to the five postulates, Euclid laid out five **common notions**, which are just logical statements we all generally take for granted (e.g., a whole is greater than a part). Together, they are referred to as the **10 axioms** (assumptions), which are rules that cannot be violated in Euclidean geometry.

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