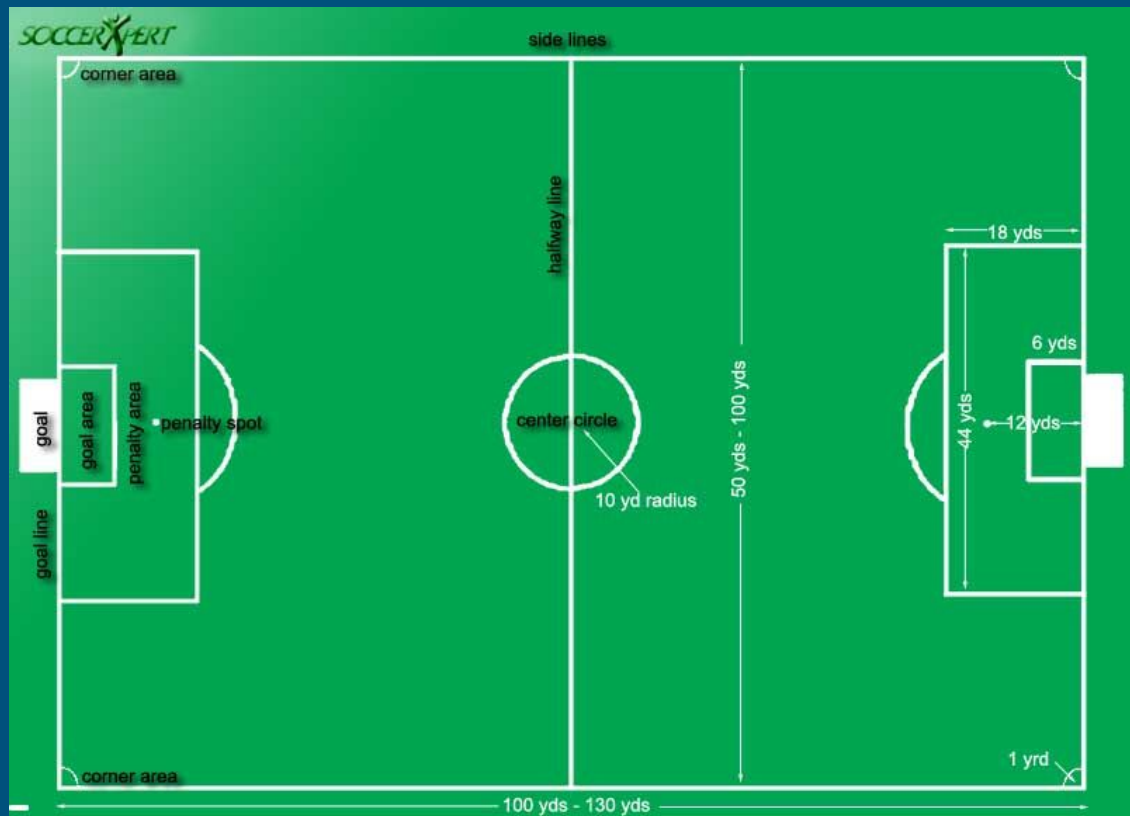
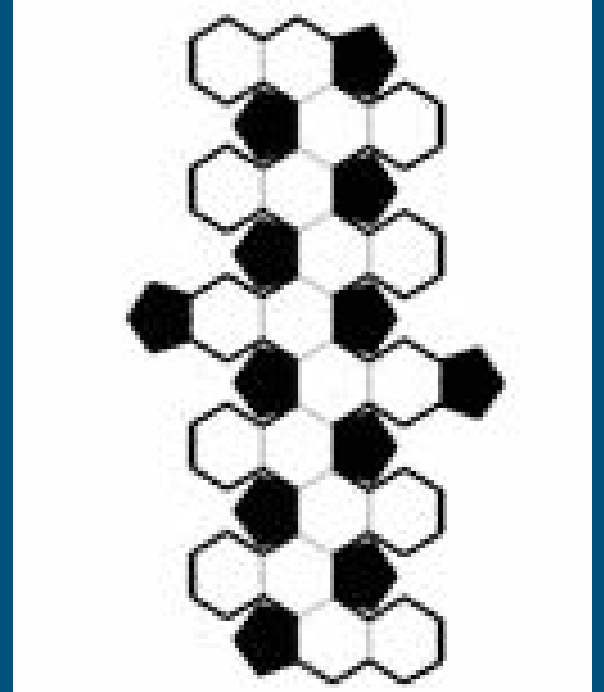


Math in the Beautiful Game



Geometry

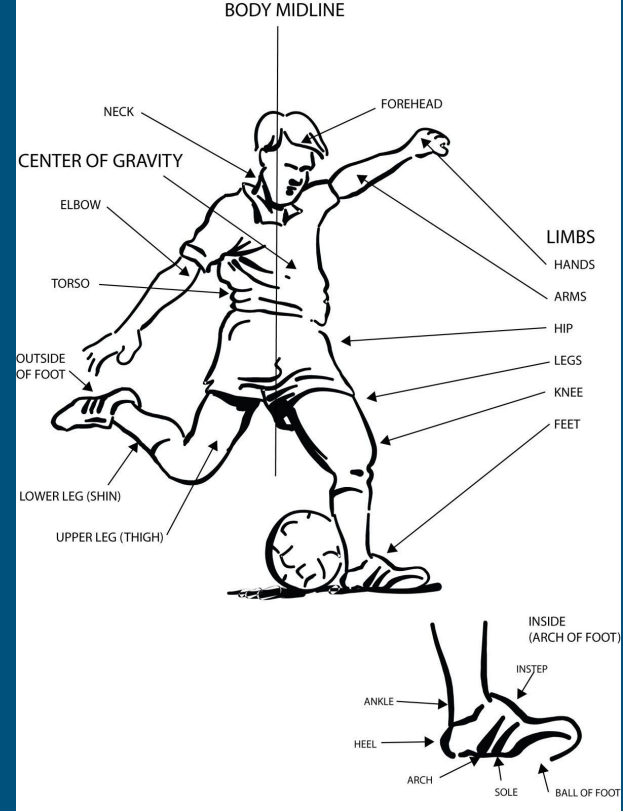
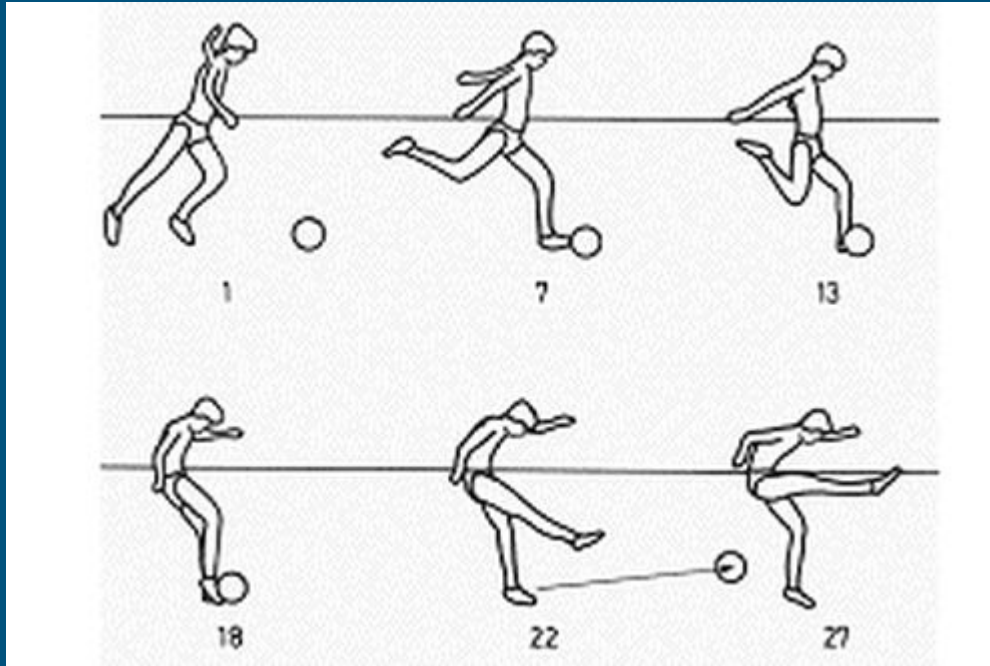




Technique



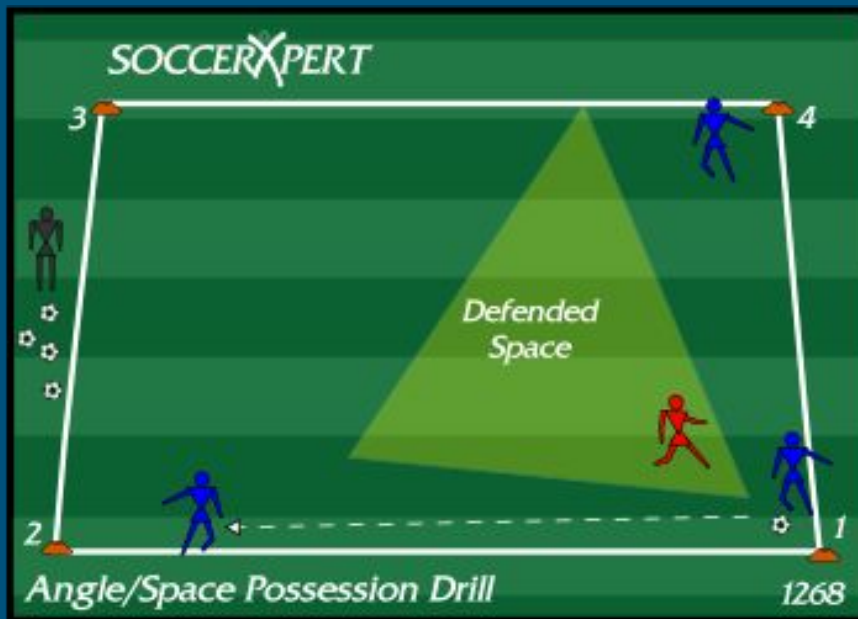
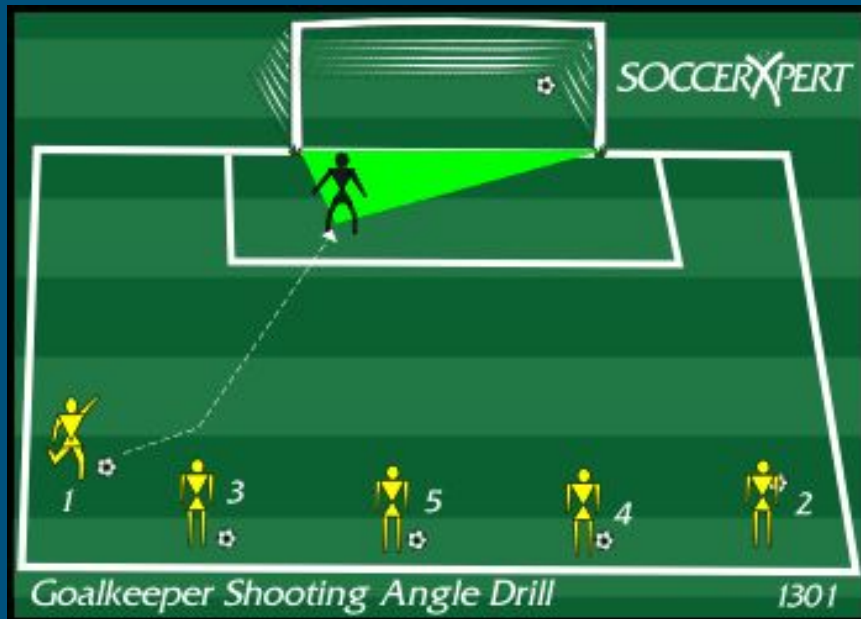
Striking the Ball



Strike Zones



Angles



Formation



4-4-2



4-2-3-1



4-5-1



4-3-3

Roberto Carlos- “Improbable Goal”

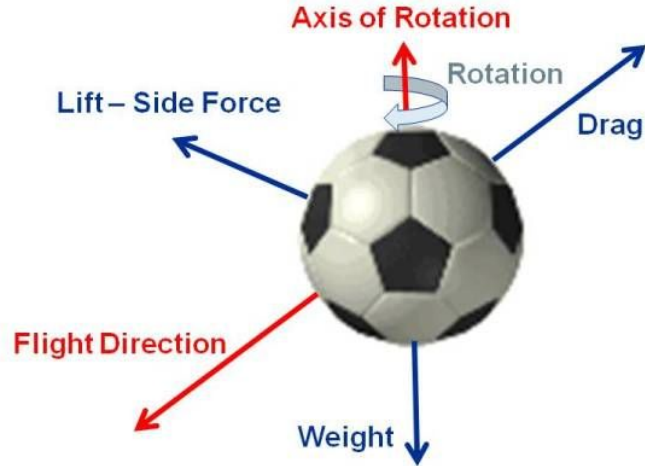


Flight Path (Trajectory and Curvature)



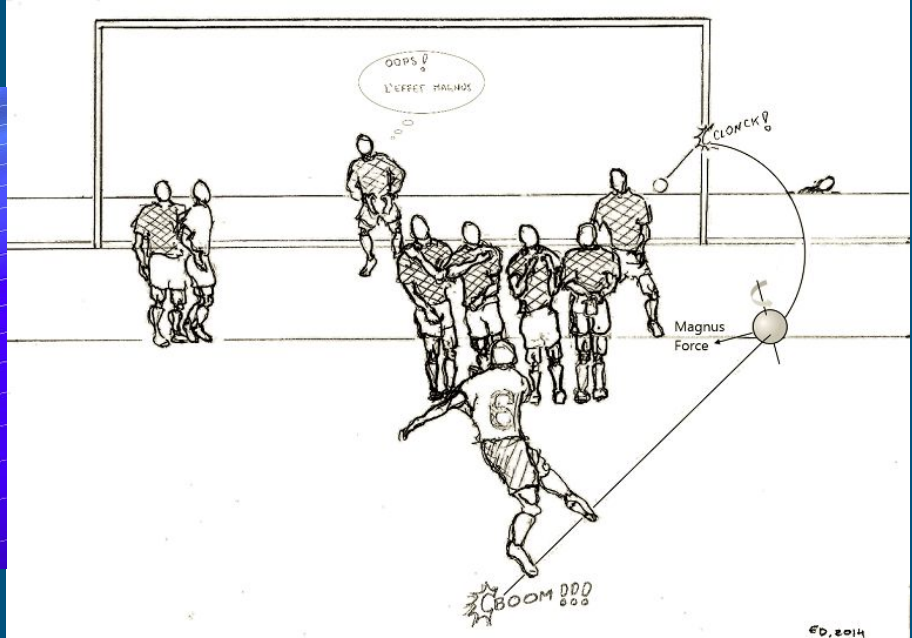
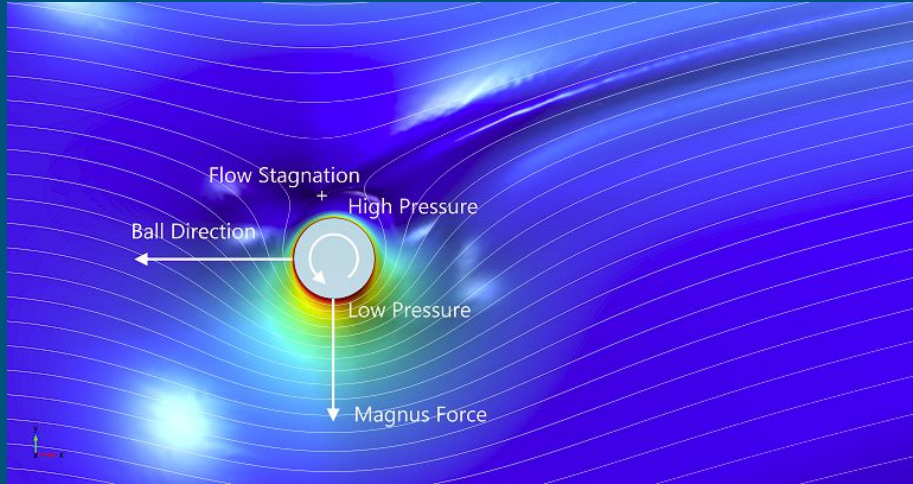


Forces on a Soccer Ball



- Ball is kicked and rotation is given.
- Ball “curves” in direction the ball rotates.
- Typically ball struck with **right** foot curves towards the **left** and ball struck with **left** foot curves **right**.

Magnus Force



Conclusion

1. Geometry
2. Technique
3. Angles
4. Flight Path



Q & A

