1. D=C>B>A
2. D=C>B>A
3. C>A=B=D
4. C>A=D>A
5. A. Equal Distance. Add the two legs of the triangle
   B. Rider A. Calculate the hypotenuse for each rider.
   C. Rider A. Rider A has the greater displacement
6. Object velocity is increasing.
7. A, B, D. The ball's velocity is increasing at a constant rate, and acceleration is the change in velocity.
8. A. No. This is because the ball is constantly changing direction, and because velocity is the change in speed + direction, thus it's velocity is changing
   B. Yes. The object is accelerating because it's velocity is constantly changing.
9. $v = v_0 + at$

   $t = 11s$

   $x = x_0 + v_0 t + \frac{1}{2} a t^2$

   $x = 181.5m$