The picture shows the spinning propeller of a single-engine airplane captured by the camera of an iPhone 4. The artifacts are caused by the "rolling shutter" of the CMOS image sensor, which doesn't snap the entire image in one instance but instead captures it row-by-row over the time period of 28 ms.

1. Assuming clockwise rotation, in which direction does the rolling shutter sweep across the image?

2. How many blades does the propeller have?

3. How fast does the propeller spin?