1. Here are the filled-in minimum sea-level pressures and maximum winds in Hurricane Zoë at twelve-hour intervals from assignment 1. Using the table in the notes, assign Saffir-Simpson categories for the times shown.

| Day/Time | $p_{c}(\mathrm{mb})$ | $\mathrm{V}(\mathrm{kt})$ | $\mathrm{V}(\mathrm{mph})$ | SS CAT |
| ---: | ---: | ---: | ---: | ---: |
| $01 / 00 \mathrm{Z}$ | 1008 | 32.5 | 37.4 |  |
| $01 / 12 \mathrm{Z}$ | 994 | 63.4 | 72.9 |  |
| $02 / 00 \mathrm{Z}$ | 959 | 106.9 | 123.0 |  |
| $02 / 12 \mathrm{Z}$ | 935 | 128.5 | 147.8 |  |
| $03 / 00 \mathrm{Z}$ | 930 | 132.6 | 152.4 |  |
| $03 / 12 \mathrm{Z}$ | 901 | 154.0 | 177.1 |  |
| $04 / 00 \mathrm{Z}$ | 917 | 142.6 | 163.9 |  |
| $04 / 12 \mathrm{Z}$ | 965 | 100.8 |  |  |
| $05 / 00 \mathrm{Z}$ | 988 | 72.8 |  |  |

2. If a hurricane with 90 kt maximum circulation (in a reference frame moving with the cyclone) is moving straight west at 10 kt , what is the strongest value of the wind relative to the sea surface at each of these locations in the eyewall relative to the center? Here we are looking for the swirling (tangential) component of the wind. Neglect any radial (in or out) component due to the motion.
a. North of the center $\qquad$ c. East of the center $\qquad$
b. South of the center $\qquad$ d. West of the center $\qquad$ ?

Due: Wednesday 04OCT17.

