

## Answers to Test IIb

1. (a)  $\mathbf{v}_B = 10.00 \text{ ft/s} \downarrow$

(b)  $\mathbf{v}'_A = 5.87 \text{ ft/s} \rightarrow$ ,  $\mathbf{v}'_B = 8.02 \text{ ft/s} \angle 236.7^\circ$

2.  $\omega_{BD} = 0.580 \text{ rad/s} \curvearrowright$ ,  $\mathbf{v}_D = 6.32 \text{ ft/s} \downarrow$

Or  $\omega_{BD} = 1.380 \text{ rad/s} \curvearrowleft$ ,  $\mathbf{v}_D = 1.519 \text{ ft/s} \uparrow$

3. A. (f).    B. (a).    C. (g).

4. See text.