1) Choose $v_1 v_3$

2) Choose $v_7 v_8$

3) Choose $v_2 v_3$ → $v_1 v_2$ would now form Cycle

4) -''- $v_3 v_5$ → $v_2 v_5$ would now form Cycle

5) -''- $v_4 v_5$ → $v_2 v_4$ would now form Cycle

6) -''- $v_6 v_8$ → $v_6 v_7$ would now form Cycle

7) -''- $v_5 v_6$ → There are already paths
for $v_5 v_7$ and $v_4 v_6$ so
we are finished

$$\{ v_1 v_3, v_7 v_8, v_2 v_3, v_3 v_5, v_4 v_5, v_6 v_8, v_5 v_6 \}$$