$$P_{1} = \sigma_{z}^{(1)} \sigma_{z}^{(2)}$$

$$P_{2} = \sigma_{z}^{(2)} \sigma_{z}^{(3)}$$

$$P_{3} = \sigma_{z}^{(8)} \sigma_{z}^{(9)}$$

$$P_{4} = \sigma_{z}^{(8)} \sigma_{z}^{(9)}$$

$$P_{5} = \sigma_{z}^{(1)} \sigma_{z}^{(2)}$$

$$P_{6} = \sigma_{z}^{(8)} \sigma_{z}^{(9)}$$

$$P_{7} = \sigma_{z}^{(9)}$$

$$P_{7} = \sigma_{z}^{(9)}$$