A Definition of noise

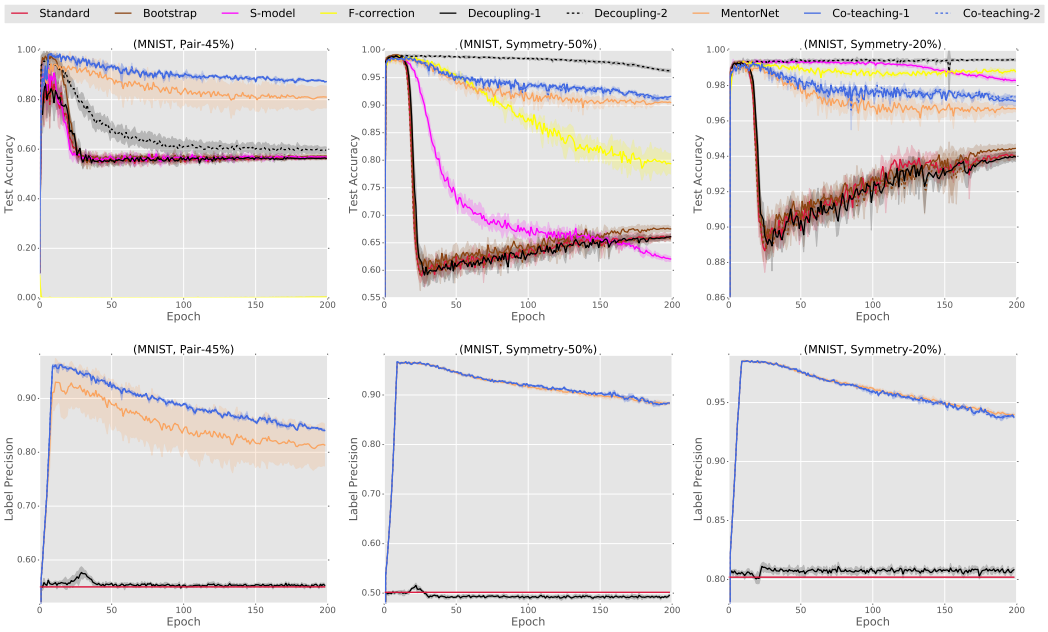
The definition of transition matrix Q is as follow. n is number of the class.

$$\text{Pair flipping:} \quad Q = \begin{bmatrix} 1-\epsilon & \epsilon & 0 & \dots & 0 \\ 0 & 1-\epsilon & \epsilon & & 0 \\ \vdots & & \ddots & \ddots & \vdots \\ 0 & & & 1-\epsilon & \epsilon \\ \epsilon & 0 & \dots & 0 & 1-\epsilon \end{bmatrix},$$

$$\text{Symmetry flipping:} \quad Q = \begin{bmatrix} 1-\epsilon & \frac{\epsilon}{n-1} & \dots & \frac{\epsilon}{n-1} & \frac{\epsilon}{n-1} \\ \frac{\epsilon}{n-1} & 1-\epsilon & \frac{\epsilon}{n-1} & \dots & \frac{\epsilon}{n-1} \\ \vdots & & \ddots & & \vdots \\ \frac{\epsilon}{n-1} & \dots & \frac{\epsilon}{n-1} & 1-\epsilon & \frac{\epsilon}{n-1} \\ \frac{\epsilon}{n-1} & \frac{\epsilon}{n-1} & \dots & \frac{\epsilon}{n-1} & 1-\epsilon \end{bmatrix}.$$

B Full Y-axis figures

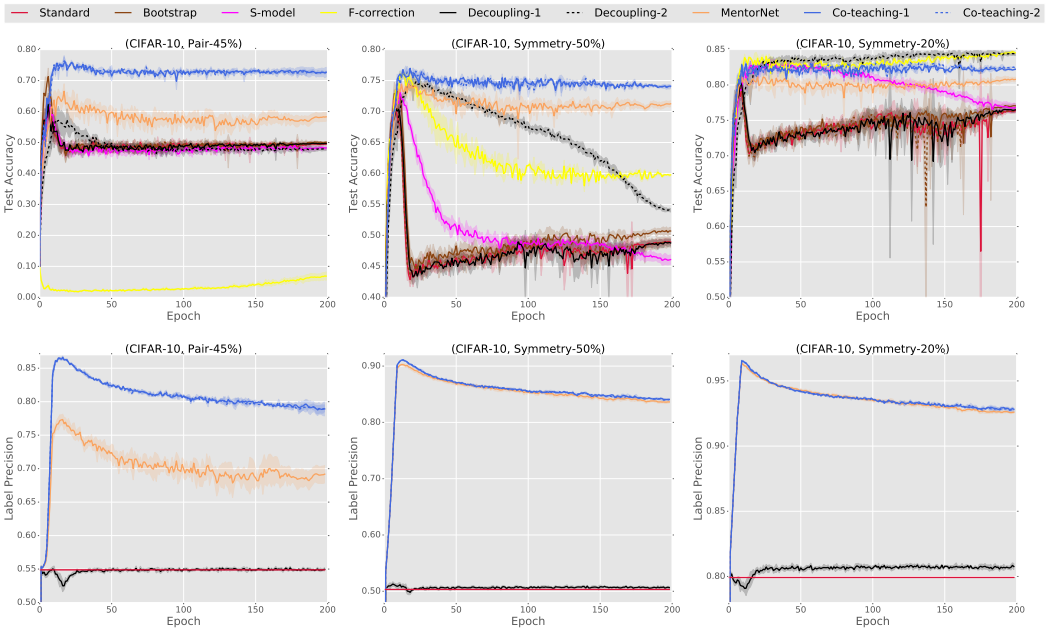
B.1 *MNIST*



(a) Pair-45%. (b) Symmetry-50%. (c) Symmetry-20%.

Figure 7: Results on *MNIST* dataset. Top: test accuracy vs. number of epochs; bottom: label precision vs. number of epochs.

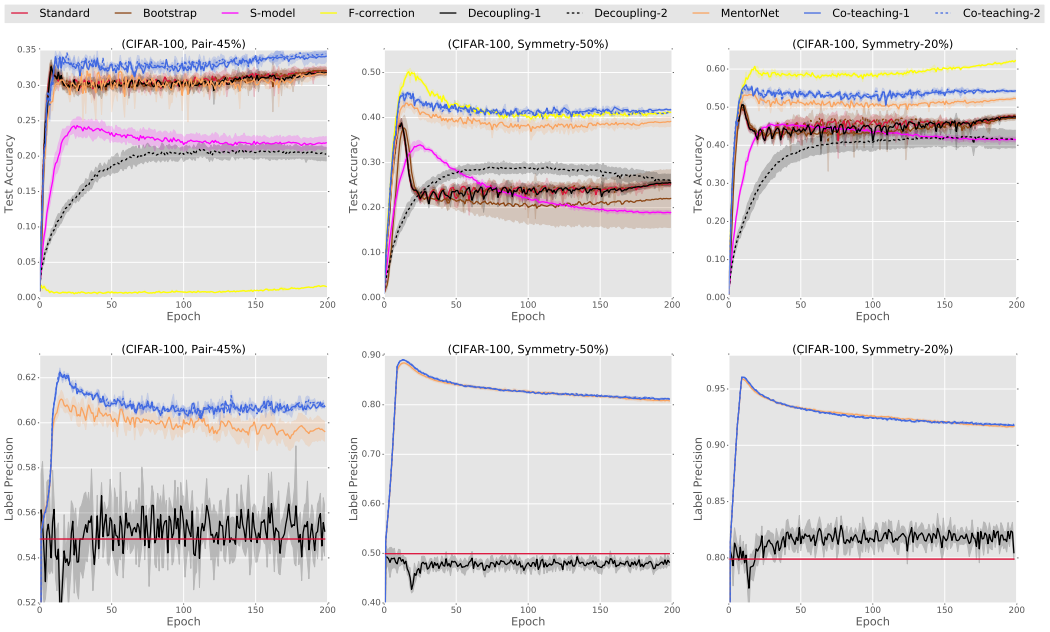
B.2 *CIFAR-10*



(a) Pair-45%. (b) Symmetry-50%. (c) Symmetry-20%.

Figure 8: Results on *CIFAR-10* dataset. Top: test accuracy vs. number of epochs; bottom: label precision vs. number of epochs.

B.3 *CIFAR-100*



(a) Pair-45%. (b) Symmetry-50%. (c) Symmetry-20%.

Figure 9: Results on *CIFAR-100* dataset. Top: test accuracy vs. number of epochs; bottom: label precision vs. number of epochs.