

# Information Theory

## Practice Set 13

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*Solutions are not to be returned*

*Notation:* Bold letters  $\mathbf{x}, \mathbf{y}$  denote sequences or vectors, whereas  $x, y$  are scalars. Random vectors are denoted as  $\mathbf{X}, \mathbf{Y}$ . Components of  $\mathbf{x}$  are  $x_1, \dots, x_n$ .

### Practice Set

1. Exercise problems from textbook:  
7.9, 7.15 (a–h; this is a numerical example related to the random coding argument), 7.37.
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