Lecture 1
Video 5
-5-

Fill in the chart below:

| Exercise | Ring | commutative? | set of units? | integral domain? | PID? | ED? | optimal → Divisim Ring? |
|---|---|---|---|---|---|---|---|
| (a) | $\mathbb{Z}$ | | | | | | |
| (b) | $\mathbb{Z}_n$ | | | | | | |
| (c) | $\mathbb{Q}$ | | | | | | |
| (d) | $\mathbb{R}$ | | | | | | |
| (e) | $\mathbb{C}$ | | | | | | |
| optimal → (f) | $\mathbb{H}$ | | | | | | |
| (g) | $Mat_n(R)$ Matrix ring over a ring $R$ | | | | | | |
| (h) | $R[x_1, \ldots, x_n]$ Polynomial ring over a ring $R$ | | | | | | |