Problem 1:

- **Test Instance 1:** [20, 21, 25, 28, 33, 34, 35, 36, 41, 42] number of entries that are divisible by 7
- **Test Instance 2:** [18, 54, 76, 81, 36, 48, 99] number of entries that are divisible by 9

```
Test Instance 1: 4
Test Instance 2: 5
```

Problem 2:

- **Test Instance 1:** [50, 120, 250, 100, 20, 300, 200]
- **Test Instance 2:** [12.4, 45.9, 8.1, 79.8, -13.64, 5.09]

```
Test Instance 1: 20
Test Instance 2: 3.01
```

Problem 3:

- **Test Instance 1:**

a) n=2, A = $\begin{pmatrix} 2 & 7 \\ 3 & 5 \end{pmatrix}$, B = $\begin{pmatrix} 8 & -4 \\ 6 & 6 \end{pmatrix}$

- **Test Instance 2:**

b) n=3, A = $\begin{pmatrix} 1 & 0 & 2 \\ 3 & -2 & 5 \\ 6 & 2 & -3 \end{pmatrix}$, B = $\begin{pmatrix} .3 & .25 & .1 \\ .4 & .8 & 0 \\ -.5 & .75 & .6 \end{pmatrix}$

```
Test Instance 1: [[58, 34], [54, 18]]
Test Instance 2: [[-0.7, 1.75, 1.3], [-2.4, 2.9, 3.3], [4.1, 0.85, -1.2]]
```