Question 1

```
                              ( Start )
                                  |
                    +------------------------------+
                    | Set Sum = 0, Digit = 0       |
                    +------------------------------+
                                  |
                       /  Get N  /
                                  |
      +--------------------------+
      |           +------------------------------+
      |           | Digit = N % 10               |
      |           | Sum = Sum + Digit            |
      |           +------------------------------+
      |                          |
      |              +----------------+
      |              |  N = N / 10    |
      |              +----------------+
      |                          |
      |   Yes        < N > 0 >        No      / Print Digit " = " Sum /
      /Print Digit " + "/
```

Decision and print flow:

- N > 0 — Yes → Print Digit " + " (loops back)
- N > 0 — No → Print Digit " = " Sum

- Sum % 3 == 0
  - No → Sum % 4 == 0
    - No → Sum % 5 == 0
      - Yes → Print Sum " is multiple of 5."
      - No → Stop
    - Yes → Sum % 5 == 0
      - No → Print Sum " is multiple of 4."
      - Yes → Print Sum " is multiple of 4 and 5."
  - Yes → Sum % 4 == 0
    - No → Sum % 5 == 0
      - Yes → Print Sum " is multiple of 3 and 5."
      - No → Print Sum " is multiple of 3."
    - Yes → Sum % 5 == 0
      - No → Print Sum " is multiple of 3 and 4."
      - Yes → Print Sum " is multiple of 3,4 and 5."

(Stop)

Question 2

```
                    ( Start )
                        |
            [ Set Sum = 0 , Digit = 0 ]
                        |
                  / Get N /  <──────────────────┐
                        |                        │
                   < N > 0 >──── No ─────────────┤
                        |                        │
                      Yes                        │
                        |                        │
      ┌────────[ Digit = N % 10 ]                │
      │         [ Sum = Sum + Digit ]            │
      │               |                          │
      │         [ N = N / 10 ]                   │
      │               |                          │
      │          < N > 0 >──── No ──── / Print Digit "=" Sum /
      │               |                          │
      │             Yes                          │
      │               |                          │
      └──── / Print Digit "+" /                  │
                                                 │
                                                 │
  / Print Sum " is odd number." / ── No ── < Sum % 2 == 0 > ── Yes ── / Print Sum " is even number." /
                                                 │
                                                 │
                           < Sum % 4 == 0 > ── Yes ── < Sum % 5 == 0 > ── Yes ── / Print Sum " is multiple of 4 and 5." /
                                   |                        |
                                  No                        No
                                   |                        |
      / Print Sum " is multiple of 5." / ── Yes ── < Sum % 5 == 0 >    / Print Sum " is multiple of 4." /
                                                        |
                                                       No
                                                        |
                                                    ( Stop )
```