```
                          ┌──────────┐
                          │  Start   │
                          └────┬─────┘
                               │
                               ▼
                    ┌──────────────────────┐
                    │ Input:               │
                    │ Area code (3 digits) │
                    │ Phone number (7 digits)│
                    │ Number of messages   │
                    └──────────┬───────────┘
                               │
                               ▼
                    ┌──────────────────────┐
                    │ Set baseCharge = 5   │
                    └──────────┬───────────┘
                               │
                               ▼
```

Yes → totalBeforeTax = baseCharge

numMessages ≤ 100?

No → numMessages ≤ 300?   **No**

Yes →

$\text{extra} = (\text{numMessages} - 100) \times 0.03$
$\text{totalBeforeTax} = \text{baseCharge} + \text{extra}$

$\text{tax} = \text{totalBeforeTax} \times 0.14$
$\text{totalAfterTax} = \text{totalBeforeTax} + \text{tax}$

Display:
Area code, Phone number, numMessages
Bill before tax (totalBeforeTax)
Bill after tax (totalAfterTax)

End

$$extra1 = 200 \times 0.03$$
$$extra2 = (numMessages - 300) \times 0.02$$
$$totalBeforeTax = baseCharge + extra1 + extra2$$