

Bài 1:

The screenshot shows the Visual Studio Code editor with a Python file named `h0 = 1,6.py`. The code defines variables `h0 = 1.6`, `v0 = 14.2`, and `g = 9.8`. It prompts the user to input time `t` and calculates height `h` and velocity `v` using the equations $h = h_0 + v_0 \cdot t - 0.5 \cdot g \cdot t^2$ and $v = v_0 - g \cdot t$. The terminal shows the execution results for `t = 0.5` and `t = 2`.

```
1 h0 = 1.6
2 v0 = 14.2
3 g = 9.8
4 t = float(input("Nhập thời gian: "))
5 h = h0 + v0 * t - 0.5 * g * t**2
6 v = v0 - g*t
7 print("h = ", h)
8 print("v = ", v)
```

Terminal output:

```
PS C:\python> & "C:/Users/VAN DUC/AppData/Local/Programs/Python/Python312/python.exe" "c:/python/h0 = 1,6.py"
Nhập thời gian: 0.5
h = 7.475
v = 9.299999999999999
PS C:\python> & "C:/Users/VAN DUC/AppData/Local/Programs/Python/Python312/python.exe" "c:/python/h0 = 1,6.py"
Nhập thời gian: 2
h = 10.399999999999999
v = -5.400000000000002
PS C:\python>
```

Bài 2:

The screenshot shows the Visual Studio Code editor with a Python file named `v = 10.py`. The code imports the `math` module and defines variables `v0 = 10` and `a = 2.5`. It prompts the user to input time `z` and calculates velocity `V` using the equation $V = v_0 \cdot (1 - z / (\sqrt{a^2 + z^2}))$. The terminal shows the execution results for `z = 13`.

```
1 import math
2 v0 = 10
3 a = 2.5
4 z = 4 + 1/3
5 V = v0 * (1 - z / (math.sqrt(a**2 + z**2)))
6 print("V= ", V)
7 z = 8 + 2/3
8 V = v0 * (1 - z / (math.sqrt(a**2 + z**2)))
9 print("V= ", V)
10 z = 13
11 V = v0 * (1 - z / (math.sqrt(a**2 + z**2)))
12 print(f"V= ", V)
```

Terminal output:

```
PS C:\python> & "C:/Users/VAN DUC/AppData/Local/Programs/Python/Python312/python.exe" "c:/python/v = 10.py"
V= 1.338144139513996
V= 0.39176408819185335
V= 0.17993553019352682
PS C:\python>
```

Bài 3:

The screenshot shows the Visual Studio Code interface with a Python file named `import math.py` open. The code in the editor is as follows:

```
1 import math
2 ln2 = math.log(2)
3 a = (2 + (math.e)**2.8) / (math.sqrt(13) - 2)
4 b = (1 - (1 + ln2) ** -3.5) / (1 + math.sqrt(5))
5 c = math.sin((2 - math.sqrt(2)) / (2 + math.sqrt(2)))
6 print([a, b, c])
```

The terminal at the bottom shows the command to run the script and its output:

```
PS C:\python> & "C:/Users/VAN DUC/AppData/Local/Programs/Python/Python312/python.exe" "c:/python/import math.py"
11.488845914888644 0.2608973689431575 0.17073234104506005
PS C:\python>
```

The status bar at the bottom indicates the file is at line 6, column 16, using UTF-8 encoding with CRLF line endings, and is a Python 3.12.6 64-bit file.