

Name _____

Date _____

VERTEXMATH · BUILD YOUR OWN · MTH1W GRADE 9

Coding with Python: your summary

1 Fill in every blank from memory. No notes.

2 Check it against the Unit Summary in a different colour.

3 Tick ✓ or X on each card. Every X is a topic to review.

vertexmath.ca
Worksheet, answers &
this cheat sheet



Which tool?

Write the tool for each case.

Print 12 labels

Double until over 1000

Grade A, B or C

1 Variables and print

☒ ☒

1 What does this print?

```
n = 9
n = n - 2
n = n * 3
print("n is", n)
```

2 What does = do? What does == do?

2 Operators

☒ ☒

3 Evaluate $17 // 5$, $17 \% 5$, $17 / 5$ and $3 ** 4$.

4 Write $9/(2m)$ in Python.

3 Data types and input

☒ ☒

5 Name the data type of "3.5", 3.5 and 35.

6 Write one line that asks for a price (it can have cents) and stores it as a number.

4 The math library

☒ ☒

7 A right triangle has legs 9 and 40. Write the Python expression for its hypotenuse and give the output.

5 for loops

☒ ☒

8 List the values of `range(6)`, `range(3, 8)` and `range(0, 20, 5)`.

9 Write a `range` that gives 2, 4, 6, 8, 10.

6 while loops

☒ ☒

10 What does this print?

```
x = 2
while x < 40:
    x = x * 2
print(x)
```

7 Running total

☒ ☒

11 Write a program that prints the product $1 \times 2 \times 3 \times 4 \times 5 \times 6$.

8 Conditional statements

☒ ☒

12 Write a program that prints `pass` if `score` is at least 50, `close` if it is at least 40, and `fail` otherwise. What does it print for 50 and 39?

9 Loops with branches

☒ ☒

13 Write a program that counts the multiples of 7 from 1 to 50. What does it print?

14 My plan for a word problem in code: inputs, formula, branches, check. (no single answer)

My traps Your three most likely mistakes, and how you will catch each one.

1 _____ **2** _____ **3** _____

Answers · Answers to the numbered prompts. Cover this strip until you are done.

1 n is 21
2 = stores a value; == tests whether two values are equal
3 3, 2, 3, 4, 81
4 9 / (2 * m)
5 str, float, int
6 p = float(input("Price: "))
7 math.sqrt(9**2 + 40**2) gives 41.0
8 0 to 5; 3 to 7; 0, 5, 10, 15
9 range(2, 11, 2)
10 64
11 p = 1; for k in range(1, 7):
 p = p * k; print(p) gives 720
12 if score >= 50: ... elif score >= 40:
 ... else: ... pass, fail
13 if n % 7 == 0: inside
 for n in range(1, 51): print 7