1. Divisible by 9 – need to see each digit

➜ ch5 git:(master) ✗ ./q1
Enter a number: 9
d = 9, sum = 9
n = 9 is divisible by 9
➜ ch5 git:(master) ✗ ./q1
Enter a number: 154368
d = 8, sum = 8
d = 6, sum = 14
d = 3, sum = 17
d = 4, sum = 21
d = 5, sum = 26
d = 1, sum = 27
n = 154368 is divisible by 9
➜ ch5 git:(master) ✗ ./q1
Enter a number: 123456
d = 6, sum = 6
d = 5, sum = 11
d = 4, sum = 15
d = 3, sum = 18
d = 2, sum = 20
d = 1, sum = 21
n = 123456 is not divisible by 9

2. Divisible by 9 – using characters

➜ ch5 git:(master) ✗ ./q2
Enter a number: 154368
d = 1, sum = 1
d = 5, sum = 6
d = 4, sum = 10
d = 3, sum = 13
d = 6, sum = 19
d = 8, sum = 27
is divisible by 9
➜ ch5 git:(master) ✗ ./q2
Enter a number: 9
d = 9, sum = 9
is divisible by 9
➜ ch5 git:(master) ✗ ./q2
Enter a number: 123456
d = 1, sum = 1

d = 2, sum = 3
d = 3, sum = 6
d = 4, sum = 10
d = 5, sum = 15
d = 6, sum = 21
is not divisible by 9

5. GCD

➜ ch5 git:(master) ✗ ./q5
Enter two numbers (m n): 6 42
6
➜ ch5 git:(master) ✗ ./q5
Enter two numbers (m n): 42 6
6
➜ ch5 git:(master) ✗ ./q5
Enter two numbers (m n): 735 -252
21
➜ ch5 git:(master) ✗ ./q5
Enter two numbers (m n): -252 735
21
➜ ch5 git:(master) ✗ ./q5
Enter two numbers (m n): 51 -2
1

10. Van der Waal's Equation / Air Pressure

➜ ch5 git:(master) ✗ ./q10
Quantity of carbon dioxide (moles)> 0.02
Temperature (kelvin)> 300
Initial volume (milliliters)> 400
Final volume (milliliters)> 600
Volume increment (milliliters)> 50

0.020000 moles of carbon dioxide at 300.0 K
Volume (ml)   Pressure (atm)

400   1.2246
450   1.0891
500   0.9807
550   0.8918
600   0.8178
➜ ch5 git:(master) ✗ ./q10
Quantity of carbon dioxide (moles)> 0.102

Temperature (kelvin)> 300
Initial volume (milliliters)> 400
Final volume (milliliters)> 500
Volume increment (milliliters)> 100

0.102000 moles of carbon dioxide at 300.0 K

Volume (ml)	Pressure (atm)
400	6.1131
500	4.9167

14. Half-Life

➜ ch5 git:(master) ✗ ./q14
****
Half-Life Co-60
****
Enter amount of Co-60: 1

Year	Amount
1	0.876824
2	0.768820
3	0.674120
4	0.591084
5	0.518277

15. PI

➜ ch5 git:(master) ✗ ./q15
Approx PI: 3.121595

ENGR120 Chapter 5 Test Results

Student Name: _____

Date: _____   Time: _____   Tester:_____

1. Divisible by 9 – need to see each digit

Code compiles:☐Y ☐N   # of warnings: _____
Code ran: ☐Y ☐N   Correct: ☐Y ☐N   Terminated OK: ☐Y ☐N
Output was free from extraneous output: ☐Y ☐N
Comments:

2. Divisible by 9 – using characters, use ctrl-d to terminate input

Code compiles:☐Y ☐N   # of warnings: _____
Code ran: ☐Y ☐N   Correct: ☐Y ☐N   Terminated OK: ☐Y ☐N
Output was free from extraneous output: ☐Y ☐N
Comments:

5. GCD

Code compiles:☐Y ☐N   # of warnings: _____
Code ran: ☐Y ☐N   Correct: ☐Y ☐N   Terminated OK: ☐Y ☐N
Output was free from extraneous output: ☐Y ☐N
Comments:

10. Van der Waal's Equation / Air Pressure

Code compiles:☐Y ☐N   # of warnings: _____
Code ran: ☐Y ☐N   Correct: ☐Y ☐N   Terminated OK: ☐Y ☐N
Output was free from extraneous output: ☐Y ☐N
Comments:

14. Half-Life

Code compiles:☐Y ☐N   # of warnings: _____
Code ran: ☐Y ☐N   Correct: ☐Y ☐N   Terminated OK: ☐Y ☐N
Output was free from extraneous output: ☐Y ☐N
Comments:

15. PI

Code compiles:☐Y ☐N   # of warnings: _____
Code ran: ☐Y ☐N   Correct: ☐Y ☐N   Terminated OK: ☐Y ☐N
Output was free from extraneous output: ☐Y ☐N
Comments: