"The Nine Chapters on the Mathematical Art" Contest (NCC) 2016 ©

Student Name:
Please write your name on <i>every</i> page.
Section C
C1 Lupo tosses 2 fair coins. What is the probability that he gets no heads?
Answer to C1:
C2 Three pirates find treasure. The first pirate takes 2 gold coins and one third of the rest. The second pirate takes 1 gold coin and two thirds of the rest. The last pirate takes the remaining 3 gold coins. How big was the treasure?
Answer to C2:
C3 How many positive whole numbers are factors of 56? (That is, how many positive whole numbers divide evenly into 56?)
Answer to C3:
C4 Alice is 10 years old, Bob is 3 years old, and Cameron is 1 year old. In how many years will the sum of Bob's and Cameron's ages equal Alice's age?
Answer to C4:
C5 A bucket of water weighs 13 kg in total. After pouring out half of the water, the bucket and the water now weigh 8 kg in total. How much does the bucket weigh?
Answer to C5:

Student Name:	
	Please write your name on every page.

C6

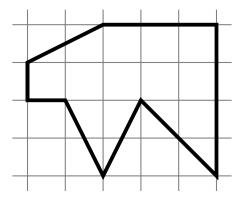
How many odd perfect squares are there between 50 and 10000?

Note: A perfect square is a number that can be written as the product of an integer with itself. For example, 25 is a perfect square because $25 = 5^2 = 5 \times 5$.

Answer to C6: _____

C7

If each grid cell has area 1, what is the area of the following figure?



Answer	to	C7:	

C8

Sophie got her test results back for English, Math, Chemistry, and French tests. Her overall average on the four tests is 93. The average on her English and Math tests is 95. She scored 6 marks higher on the Chemistry test than the French test. What did she on the Chemistry test?

Answer to	C8:	