

NCC 2015

Part C

Student name: _____

1. Amy spent exactly \$1 buying 4-cent stamps and 8-cent stamps. She bought 18 stamps in total. How many 8-cent stamps did she buy?

Answer: _____

2. The price of gas was \$1.00/litre. It went up 40%, then down 20%, then down 20% again. What is the price of gas afterward, rounded to the nearest cent?

Answer: _____

3. Two squares weigh the same as ten circles. Three squares weigh the same as one star. How many circles weigh the same as **two** stars?

Answer: _____

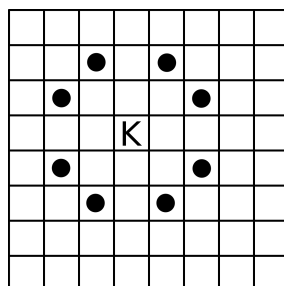
4. Aiden was baking bread. The recipe calls for 3L water and 4tsp milk powder to be completely mixed. Unfortunately, Aiden misread the recipe and mixed 5L water with the 4tsp milk powder. He wants to pour out 2L of the solution, and then add just enough milk powder to make it right, so that he doesn't have to start over. How much milk powder should he add?

Answer: _____

5. A cake is sliced into 6 equal slices. If 2 people try to share it, there are 5 ways to share the cake so that each person gets at least one slice: the first person gets either 1, 2, 3, 4, or 5 slices and the other person gets the rest. How many ways are there if there are 3 people?

Answer: _____

6. Whenever a knight moves in chess, it either moves 2 squares horizontally and 1 square vertically, or 1 square horizontally and 2 squares vertically, as pictured. What is the minimum number of moves a knight needs to make to move from one corner of an 8×8 chessboard to the diagonally opposite corner?



Answer: _____

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7. Annie is three times as old as Beth. In 4 years, Annie will be twice as old as Beth. How old is Annie now?

Answer: _____

8. There are three times as many boys as girls in a summer math camp. 23 boys get bored and leave, while a group of 33 girls arrives on another bus. If the number of boys and girls is now the same, how many boys were there initially?

Answer: _____