Math 10-C Function Notation Assignment **Name:** KEY

C5 – Functions

1. An airplane flies directly from Saskatoon, SK, to Vancouver, BC. The graph shows the relationship between the distance from Vancouver, *d*, in kilometres, and the flying time, *t*, in hours.

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For each of the following, fill in the blanks and explain what the solution means in the context of the problem.

a) d(0) = 1200

Distance is 1200 km when time is 0.

b) d(1) = 600

Distance is 600 km after 1 hr.

c) d(t) = 900, t = 0.5

After 0.5 h the distance is 900 km

d) d(t) = 0, t = 2

After 2 h the distance is 0 km.

2. The cost of a pizza based on the number of extra toppings is given by the graph below. For each of the following, fill in the blanks and explain what the solution means in the context of the problem.

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a) C(0) = 12

Cost is $12 with 0 additional toppings

b) C(4) = 15

Cost is $15 with 4 additional toppings

c) C(n) = $14.~~50~~ 25, n = 3

Three additional toppings will cost $14.25 total.

d) C(n) = $15.75, n = 5

Five additional toppings will cost $15.75 total.

3. The height of tide in a harbor is shown by the graph below. For each of the following, fill in the blanks and explain what the solution means in the context of the problem.

a) h(0) = 2

Height is 2m at 00:00.

b) h(18) = 8

Height is 8m at 18:00.

c) h(t) = 8, t = 6, 18

At 06:00 and 18:00 the height is 8m.

d) h(t) = ~~6~~ 5, t = 3, 9, 15, 21

At 03:00, 09:00, 15:00 and 21:00 the height is 5m.

4. Create your own problem similar the #1-3. Sketch your own graph of a scenario, create some questions involving function notation and solve them. Exchange with a partner.