

CS 210 Assignment 2

1. Define a BNF grammar for patterns in ML. _____25

Hint: Look at the notes on chapter 7, slides 2-20.

2. Review your answers for in Ch_6 on BBLearn.

X: integer that is divisible by 3

Y: integer that is divisible by 24

Z: prime integer greater than 3

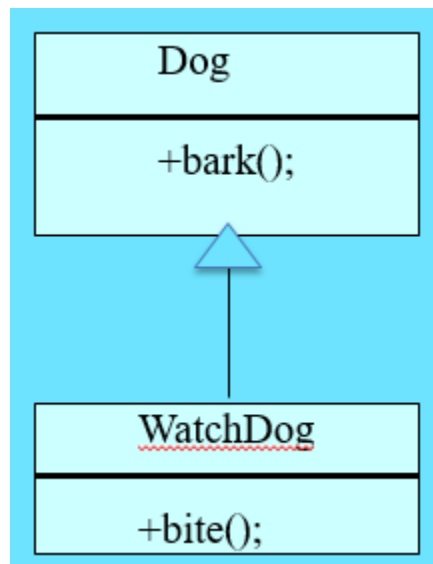
Justify your answers for each of the following:

b. $X := Y$ is safe ____ 5

c. $Z := X$ is unsafe ____ 5

e. $Y := (Z * Z) - 1$ is safe ____ 15 (I.e. if you square a prime number greater than 3 and subtract 1, the result is always a multiple of 24)

3. Draw the class diagrams for Ch8_C++_Binding_Order. Remember that in a class diagram, classes are in rectangles, with the class name on top then a line followed by the instance variables (if any), and followed by another line followed by the methods. (In this case there are only methods, no instance variables): __15



Notice that the arrow (an open triangle) is pointing at the superclass.