

- b) Into what **function** is the method **n** of class **C** converted by the compiler? Give the full function definition. (8 pts)

```
void (C this, int z) {
    print z + this.w;
}
```

- c) Assuming a pointer occupies 4 bytes, an integer occupies 4 bytes, a float occupies 8 bytes, and a character occupies one byte, how many bytes does an instance of class **C** occupy? (4 pts)

$$\begin{array}{ccccccccc}
 4 & + & 4 & + & 8 & + & 4 & + & 1 & = & 18 \text{ bytes} \\
 \downarrow & & \downarrow & & \downarrow & & \downarrow & & \downarrow & & \\
 \text{ptr to vmt} & & t & & x & & w & & y
 \end{array}$$

- d) Assume we have the following definition.

D x = new D();

Show the internal structure of the object pointed at by the variable **x**. (8 pts)

