6. (15 points total) Draw the best Lewis structure for each of the following species. Be sure to label any non-zero formal charges. Write down multiple resonance structures if they are required by symmetry.

(a) IBr₃

```
14 pairs

:\Br: \:\Br: \:\Br:
```

-3 wrong # of e-'
-3 error in formal charge
-1 not best resonance structure

(b) COCl₂

```
12 pairs

:\O: \:\:\:\:\:
\:\\C \:\:\:\:\:
:\:\\Cl: \:\:\:\:
```

-1 not best resonance structure
-3 formal charge errors
-3 octet deficiencies
-3 unreasonable structure

(c) N₃⁻

```
8 pairs

:\N=\N=\N:
```

-3 octet deficient
-1 if N₃⁻ mistaken for N₃⁻
-3 formal charge errors (radical)
-4 hypervalent N
-3 wrong # of electron pairs