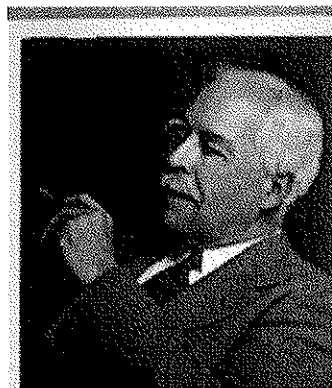
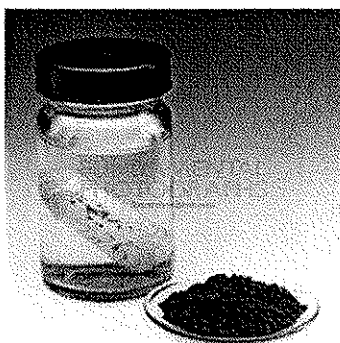


ANSWERS TO
Chem 1984 Marathon problem 8:
A Final Visit to Lewis Land
Due Monday 11 November 2013 by 4 PM
(no electronic submissions will be accepted)
(7 points)

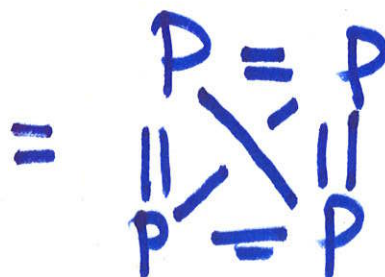
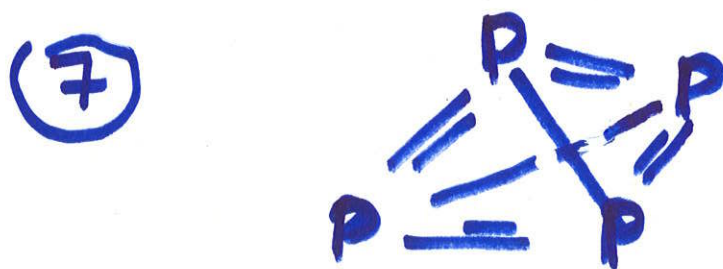
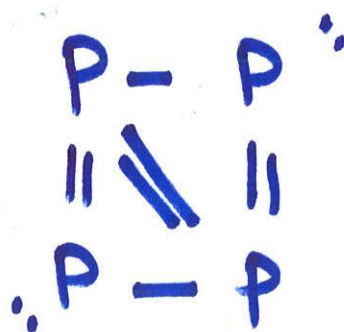
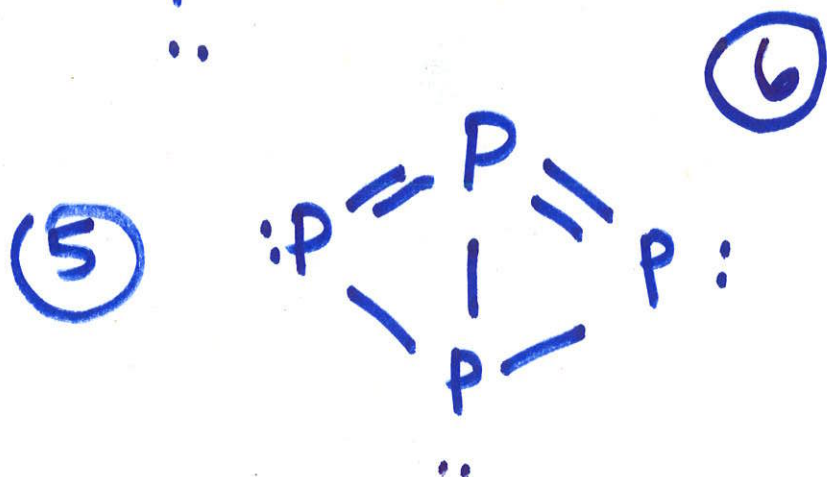
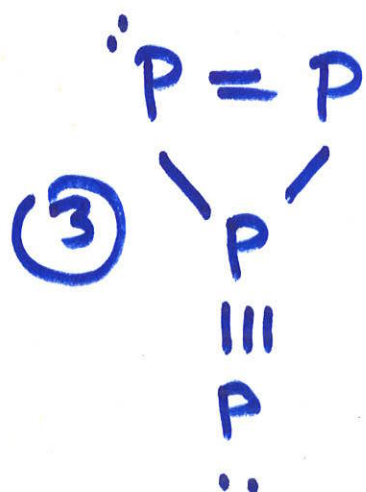
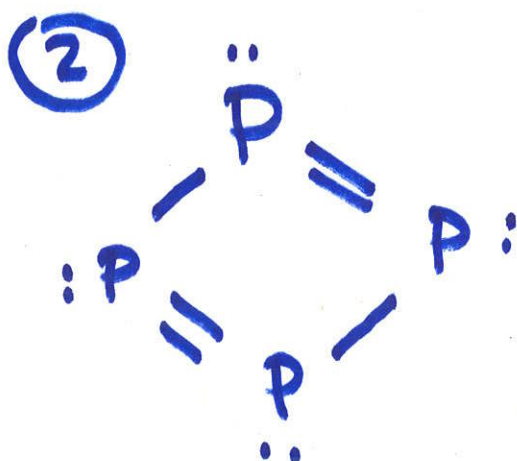
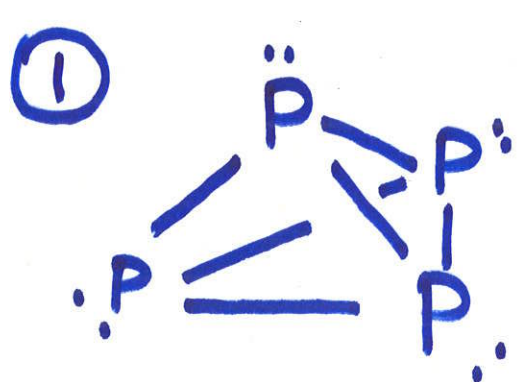


The molecular compound P_4 has a surprising number of possible alternative bonding arrangements that obey the extended Lewis rules. If we allow for non-zero formal charges on the atoms at least 14 are possible. Seven, however, show zero formal charge on all four P.

Your job is to find and draw all seven.

If you find one that obeys the rules **not** on my current list, you earn 5 extra credit points !

Doc's Answers to Marathon Problem 8



Others Provided by Students

$$P = P$$

$$\equiv \equiv$$

$$P = P$$

