# Identify electron geometry and molecule or atom geometry.

$$PBr_3$$
  $H_2S$   $AIH_3$ 

Identify the types of bonds and hybridization of each atom.

$$H_2C=C=N$$
  
 $CH_3$ 

#### Which Have Resonance Structures?

$$\begin{array}{c} \ddot{N} = C = \ddot{O} \\ \ddot{N} = \ddot{O} \ddot{N} \\ \ddot{N} = \ddot$$

# Draw the resonance structures from the previous question.

Do this on your own. Answer posted at beginning of next class meeting.

Draw all possible resonance structures. Organize by level of contribution.

$$\begin{array}{c} \bigcirc & \mathsf{H} \\ \mathsf{H}\overset{\bullet}{\mathsf{C}}^{\bullet} \overset{\circ}{\sim} \overset{\circ}{\mathsf{C}} \\ \mathsf{H}_2\overset{\circ}{\mathsf{C}} \overset{\circ}{\sim} \overset{\circ}{\mathsf{H}}_2 \end{array}$$

# Draw all possible resonance structures. Organize by level of contribution.

## Find the illegal arrows.

d. more than one e. all good

### Find the illegal arrow for resonance structures.

### Are these resonance structures?

# Find the minor contributor. Draw the missing major contributor.

#### Are these resonance structures?

$$\begin{array}{c} H \\ HC \\ C \\ C \\ CH \\ HC \\ C \\ H_2 \end{array}$$

Draw all resonance structures. Rank in order of decreasing contribution to resonance hybrid.

### Convert to Lewis, skeletal, and condensed.

 $CH_3(CH_2)_2CH(CH_3)_2CH_2CH_3$ 

$$\begin{array}{ccc} & & \text{CH}_3 \\ \text{H}_3\text{C} & \text{C} & \text{CH}_3 \\ \text{H}_2 & \text{CH}_3 \end{array}$$

$$(CH_2)_6$$

## Convert skeletal to Lewis



