2A) (8 pts) Name the following compounds according to the IUPAC rules. Remember to designate stereochemistry, when appropriate. Show all your work to receive full credit.

2B) (5 pts) Provide a drawing for the following compound: 5,6,6-trimethyl-4-(2-methylpropyl)-2-heptyne.

2C) (5 points) Which compound is more soluble in water (X, Y or neither)? Explain briefly.

$$\bigvee_{\mathbf{Y}}$$
OH