9. [6 pts - 2 each] Referring to the diagram, use correct notation to name the object(s) created below:

(a) $\overline{BD} \cup \overline{CB}$

(b) $\angle EFC \cap \angle FCD$

(c) $\angle EGC \cap \overrightarrow{GC}$

10. [8 pts] Consider this diagram again, and suppose that $\overline{BD} \parallel \overline{EH}$ with $m(\angle ACD) = 50^\circ$ and $m(\angle CGH) = 135^\circ$. Find $m(\angle FCG)$, clearly and thoroughly explaining your reasoning.

$m(\angle BCG) = 135^\circ$ because it is alternate interior with $\angle CGH$.

$m(\angle BCF) = 50^\circ$ because it is vertical with $\angle ACD$.

Then subtract to get $m(\angle FCG) = 135^\circ - 50^\circ = 85^\circ$.