$\qquad$

1. Find the global extrema of the function $f(x)=\sin (x)-\frac{x}{2}$ on the closed interval $\left[0, \frac{\pi}{2}\right]$.
2. Find the global extrema of the function $f(x)=x-2 \sqrt{x}$ on the open interval $(0,9)$.
3. Find the global extrema of the function $f(x)=\frac{x}{2}+\cos (x)$ on the closed interval $\left[0, \frac{\pi}{2}\right]$.
4. Find the global extrema of the function $f(x)=8 \sqrt{x}-x$ on the open interval $(0,25)$.
