

1. Increasing: $(1, \infty)$, Decreasing: $(-\infty, 1)$; Local min: $(1, -e)$
2. Increasing: $(-2, -1) \cup (0, \infty)$, Decreasing: $(-\infty, -2) \cup (-1, 0)$; Local max: $(-1, 1)$, Local mins: $(-2, 0)$ and $(0, 0)$
3. Increasing: $(-2, \infty)$, Decreasing: $(-\infty, -2)$; Local min: $(-2, -6\sqrt[3]{2})$
4. Increasing: $(\frac{1}{4}, \infty)$, Decreasing: $(-\infty, \frac{1}{4})$; Local min: $(\frac{1}{4}, -\frac{3}{4^{4/3}})$
5. Increasing: $(-\infty, -2) \cup (-2, 2) \cup (2, \infty)$, Decreasing: Nowhere; No local max/min
6. Increasing: $(0, \infty)$, Decreasing: $(-\infty, 0)$; Local min: $(0, 0)$
7. Increasing: $(-\infty, 0)$, Decreasing: $(0, \infty)$; Local max: $(0, 1)$
8. Increasing: $(\frac{1}{\sqrt[3]{e}}, \infty)$, Decreasing: $(0, \frac{1}{\sqrt[3]{e}})$; Local min: $(\frac{1}{\sqrt[3]{e}}, -\frac{1}{3e})$
9. Increasing: $(0, \infty)$, Decreasing: $(-\infty, 0)$; Local min: $(0, -\frac{\pi}{4})$