11. $f(x) = (7x-1)^{\frac{2}{3}}$ $[-8, 4]$

① $f'(x) = \frac{2}{3}(7x-1)^{\frac{2}{3}-1} \cdot \frac{d}{dx}(7x-1)$

$= \frac{2}{3}(7x-1)^{-\frac{1}{3}} \cdot 7$

$= \frac{2 \cdot 7}{3(7x-1)^{1/3}}$

$= \frac{14}{3(7x-1)^{1/3}}$

② $3(7x-1)^{\frac{1}{3}} = 0$

$7x - 1 = 0$

$7x = 1$

$x = \frac{1}{7}$ C.V.

③ $\underline{x = -8}$

$y = (7x-1)^{\frac{2}{3}}$

$= (7 \cdot (-8) - 1)^{\frac{2}{3}}$

$= (-57)^{\frac{2}{3}}$

$= \left(\sqrt[3]{-57}\right)^2$

$= \left(\sqrt[3]{57}\right)^2$

$= 57^{\frac{2}{3}}$

$\underline{x = \frac{1}{7}}$

$y = (7x-1)^{\frac{2}{3}}$

$= (7 \cdot \frac{1}{7} - 1)^{\frac{2}{3}}$

$= 0$

$\underline{x = 4}$

$y = (7x-1)^{\frac{2}{3}}$

$= (7 \cdot 4 - 1)^{\frac{2}{3}}$

$= (27)^{\frac{2}{3}}$

$= 9$

$27^{\frac{2}{3}}$

$\left(27^{\frac{1}{3}}\right)^2$

$\left(\sqrt[3]{27}\right)^2$

$\left(\sqrt[3]{3 \cdot 3 \cdot 3}\right)^2$

3^2

9

ABS MIN: $(\frac{1}{7}, 0)$

ABS MAX: $(-8, 57^{\frac{2}{3}})$