5. [6 points] Let

\[ F(x) = \frac{(x^2 - 4x + 4)x}{x(x - 100)(10x - 2)} \]

i) Does the graph of \( y = F(x) \) have any vertical asymptotes? If so, write their equations, otherwise write None.

**Solution:** Equations of vertical asymptotes: \( x = 100, \ x = 0.2 \)

ii) Does the graph of \( y = F(x) \) have any horizontal asymptotes? If so, write their equations, otherwise write None

**Solution:** \( y = \frac{1}{10} \)

iii) Find the zeros of the function \( F(x) \). If the function does not have zeros, write None.

**Solution:** \( x = 2 \)