

For each function state

- (1) domain of  $g$ .
- (2) range of  $g$ .
- (3) vertical asymptote(s) if any of  $g$ .
- (4) horizontal asymptote(s) if any of  $g$ .
- (5) axes intercepts if any of  $g$ .
- (6) sketch the graph of  $g$ .

Finally, produce the graph using technology.

(1)  $f(x) = \frac{3x+100}{2x-1}$

(2)  $f(x) = \frac{5x-2}{x-4}$