Rational Functions and their Graphs Evaluate It, Graph It Handout

1. If
$$f(x) = \frac{1}{x^3-2}$$
, find $f(-1)$, $f(0)$, and $f(1)$.

1. If
$$f(x) = \frac{1}{x^3-2}$$
, find $f(-1)$, $f(0)$, and 6. If $f(x) = -\frac{2}{x}$, find $f(0)$, $f(2)$, and $f(4)$.

2. If
$$f(x) = \frac{25}{x^2 - 25}$$
, find $f(-5)$, $f(0)$, and $f(5)$.

7. If
$$f(x) = \frac{2x+1}{x}$$
, find $f(-2)$, $f(0)$, and $f(2)$.

3. If
$$f(x) = \frac{10}{x}$$
, find $f(-5)$, $f(-1)$, and $f(0)$.

8. Graph
$$f(x) = \frac{2}{x}$$
.

4. If
$$f(x) = \frac{x^3}{x^2-1}$$
, find $f(0), f(1)$, and $f(2)$.

9. Graph
$$f(x) = \frac{1}{x-1}$$
.

5. If
$$f(x) = \frac{x}{x-7}$$
, find $f(0)$, $f(3)$, and $f(7)$. 10. Graph $f(x) = \frac{1}{x^2+4x}$.

10. Graph
$$f(x) = \frac{1}{x^2 + 4x}$$
.

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