Practice worksheet | Functions and graph sketching

Absolute-value graphs

Name: _____ Date: _____

6 questions | 20 marks

1. Write $f(x) = |x - 2| - 3$ piecewise and find its intercepts. [4 marks]

2. Find the turning points and zeros of $y = |x^2 - 4|$. [4 marks]

3. Solve $|2x - 1| = 5$. [3 marks]

4. For $f(x) = x - 1$, compare $|f(x)|$ and $f(|x|)$. [3 marks]

5. Give the domain, range and symmetry of $y = \left|\frac{1}{x}\right|$. [3 marks]

6. Solve $|x + 2| < 3$ and explain the interval. [3 marks]