Practice worksheet | Quadratics and Parabolas

Graphical/numerical solutions

Name: _____ Date: _____

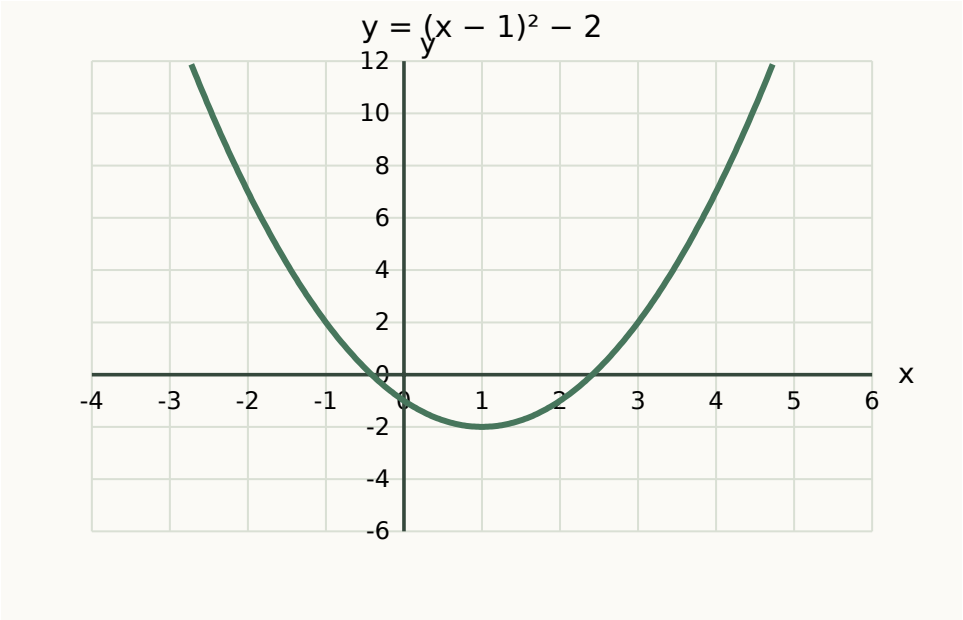
6 questions | 14 marks

1. Use a calculator to estimate both roots of $x^2 = 7$ to one decimal place. [2 marks]

2. For $f(x) = x^2 - 6$, calculate $f(2.4)$ and $f(2.5)$. [2 marks]

3. Explain what the previous outputs show about a root of $x^2 - 6 = 0$. [2 marks]

4. The graph of $y = (x - 1)^2 - 2$ is supplied. Estimate its roots to the nearest half unit. [2 marks]



5. Use a table to locate the positive root of $x^2 - 8 = 0$ between consecutive tenths. [3 marks]

6. Why does finding $x \approx 2.45$ not fully solve $x^2 = 6$ over the real numbers? [3 marks]