Supplemental Exercises for Section 2.6

At which points are each of the following functions continuous?

1. $y = \dfrac{1}{\sqrt{x-3}}$

2. $y = \dfrac{x+6}{\sqrt{5-x}}$

3. $y = \dfrac{x^2-4}{\sqrt{x^2-x-6}}$

4. $y = \dfrac{1}{x\sqrt{4-x^2}}$

5. $y = \dfrac{x+2}{\sqrt{x(x^2-1)}}$

6. $y = \sqrt{\dfrac{x-2}{1-x}}$

7. $y = \sqrt{\dfrac{x+1}{x^2+x-2}}$

Selected Answers

1. $(3, \infty)$
3. $(-\infty, -2) \cup (3, \infty)$
6. $(1, 2]$