

What are the two situations that would cause a domain to be restricted?

Numbers that cause: 1) _____
and/or 2) _____

Can zero be included in the domain of the given functions?

- | | | |
|---|-----|----|
| 1. $f(x) = \sqrt{x}$ | Yes | No |
| 2. $f(x) = \frac{1}{\sqrt{x}}$ | Yes | No |
| 3. $f(x) = \frac{1}{\sqrt{x-1}}$ | Yes | No |
| 4. $f(x) = \frac{1}{\sqrt{x}-1}$ | Yes | No |
| 5. $f(x) = \frac{\sqrt{x}}{\sqrt{x+1}}$ | Yes | No |
| 6. $f(x) = \frac{\sqrt{x}-1}{x}$ | Yes | No |
| 7. $f(x) = \frac{\sqrt{x}}{x^2}$ | Yes | No |
| 8. $f(x) = \frac{\sqrt{x}}{x^2+1}$ | Yes | No |
| 9. $f(x) = \frac{x}{x^2-1}$ | Yes | No |
| 10. $f(x) = \frac{1}{x^2+x}$ | Yes | No |

For each of the functions above, is/are there any other numbers that would be excluded from the domain? If so, list them below.

1. _____ 2. _____ 3. _____ 4. _____ 5. _____

6. _____ 7. _____ 8. _____ 9. _____ 10. _____