

- 16.** Since  $\frac{x^2 - 2}{x^4 - 4} = \frac{(x - \sqrt{2})(x + \sqrt{2})}{(x - \sqrt{2})(x + \sqrt{2})(x^2 + 2)} = \frac{x + \sqrt{2}}{(x + \sqrt{2})(x^2 + 2)}$  for  $x \neq \sqrt{2}$ , we can define the function to be  $1/4$  at  $x = \sqrt{2}$  to make it continuous there. The continuous extension is  $\frac{x + \sqrt{2}}{(x + \sqrt{2})(x^2 + 2)}$ . (Note: cancelling the  $x + \sqrt{2}$  factors provides a further continuous extension to  $x = -\sqrt{2}$ .)