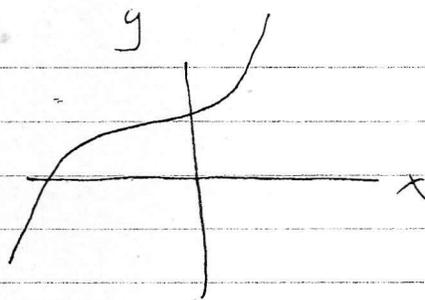


⑥ Sketch the inverse



⑦ Are the following inverses?

$$f(x) = \frac{x^2 - 3}{2} \quad g(x) = \sqrt{2x + 3}$$

⑧ The cost of a pizza varies directly with the square of its diameter. If a 12" pie (diameter) costs \$5, how much should a 15" pie cost?

⑨ The grade you will receive on this test varies directly with the number of minutes you study for the test and inversely with the number of hours of sleep you get the night before the test. If you study for 60 minutes and get 8 hours of sleep, you will receive a 95. What grade should you expect if you study for 30 minutes and get 6 hours of sleep?