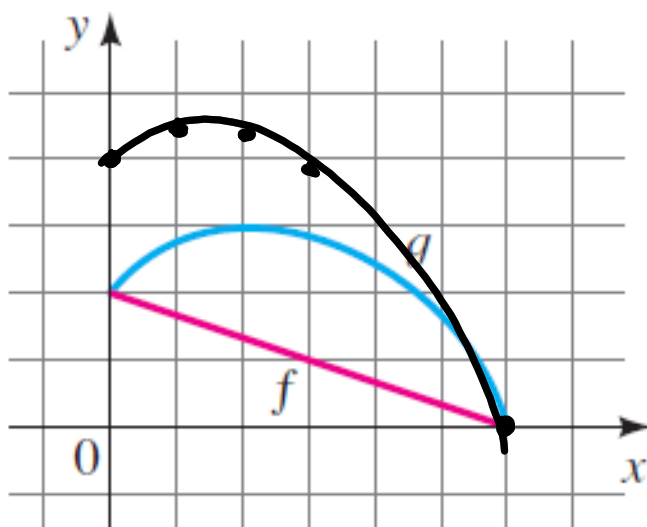


11–12 ■ Use graphical addition to sketch the graph of $f + g$.

11.



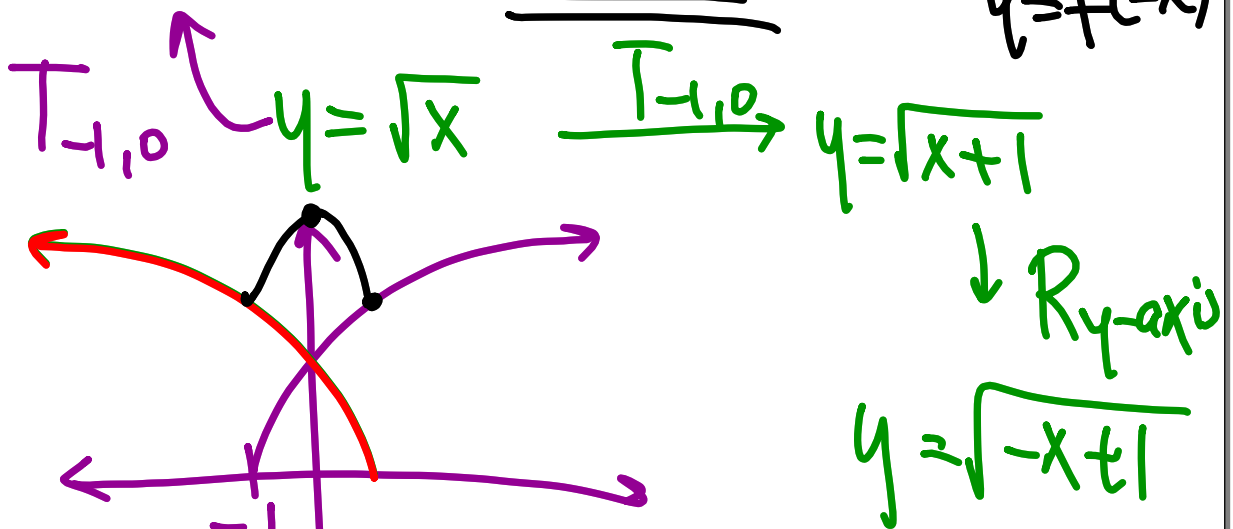
1.6 ~ 1.7

2.7



13-16 ■ Draw the graphs of f , g , and $f + g$ on a common screen to illustrate graphical addition.

13. $f(x) = \sqrt{1+x}$, $g(x) = \sqrt{1-x}$ $y=f(x) \xrightarrow{\text{Ry-axis}} y=f(-x)$



$\xrightarrow{\text{Ry-axis}} y = \sqrt{-x} \rightarrow T_{+1,0} \rightarrow y = \sqrt{-(x-1)}$

45–50 ■ Express the function in the form $f \circ g = f(g(x))$

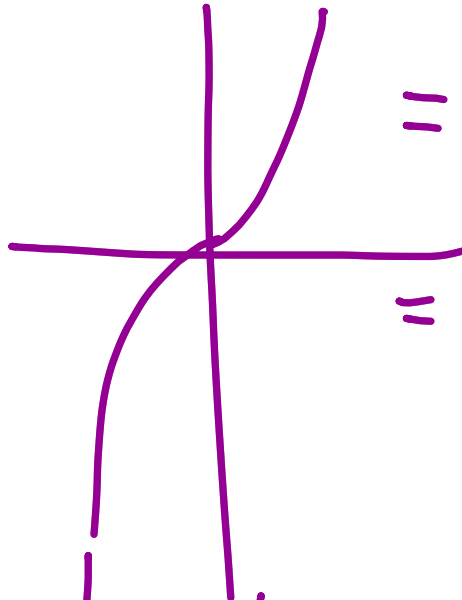
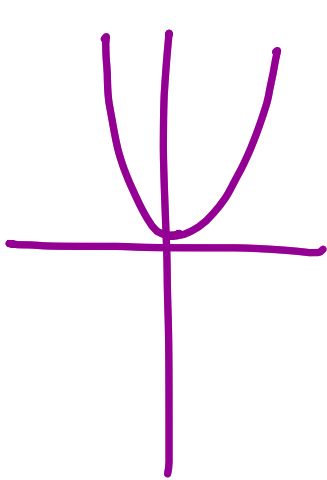
45. $F(x) = (x - 9)^5$

$$f(x) = x - 9$$

$$g(x) = (x - 9)^5 + 9$$

$f(x) = x^5$ $g(x) = x - 9$	identity function
$f(x) = x$ $g(x) = (x - 9)^5 + 9$	

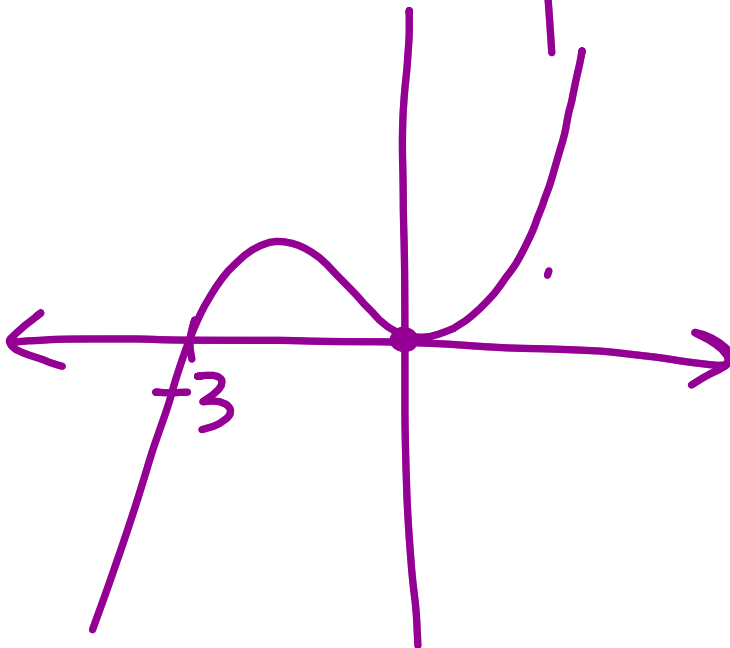
15. $f(x) = x^2$, $g(x) = \frac{1}{3}x^3$



$$f+g = x^2 + \frac{1}{3}x^3$$

$$= x^2 \left(1 + \frac{x}{3} \right)$$

↓ ↓
0 -3



$$h(x) = f(g(x))$$

$$h(x) = \sqrt{x-3}$$

$$g(x) = (e^{x-5}) + 4$$

Find $f(x)$