

Quiz5, MAT 1375 Professor Chiu

ID: _____

Name: Sol .

- This quiz consists of 10 questions, each worth 1 points, for a total of 10 points.
- You have 10 minutes to complete the quiz.
- Scientific calculators are allowed.
- Wishing you success.

True or False questions:

1. T The parabola $y = x^2 + 3$ is the parabola $y = x^2$ shifted up by 3 units.
2. ~~T~~ F The graph of $f(x) = |x - 3| + 2$ is the absolute value function $f(x) = |x|$ shifted to the right by 3 units and down by 2 unit.
3. T The line $y = 3x + 2$ is the line $y = 3x + 7$ shifted down by 5 units.
4. T The parabola $y = (x + 2)^2$ is the parabola $y = x^2$ shifted 2 units to the left.
5. T The line $y = 3(x - 2) + 2$ is the line $y = 3x + 2$ shifted 2 units to the right.

→ either "T" or "F" is correct.

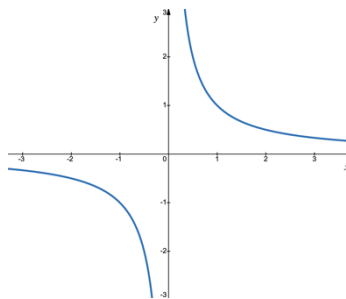
Pair the functions with the given graphs:

(a) $f(x) = \text{constant}$. (e) $f(x) = x^2$.

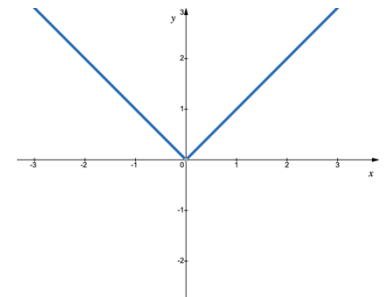
(b) $f(x) = |x|$. (f) $f(x) = \sqrt{x}$.

(c) $f(x) = x$. (g) $f(x) = x^3$.

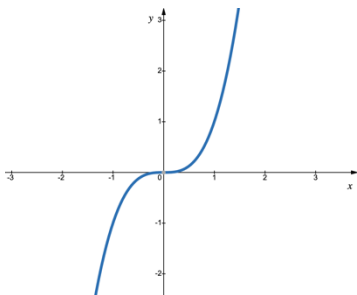
(d) $f(x) = \frac{1}{x}$. (h) $f(x) = \sqrt[3]{x}$.



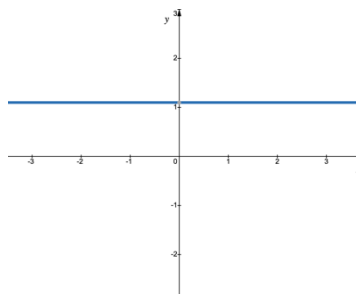
6. d



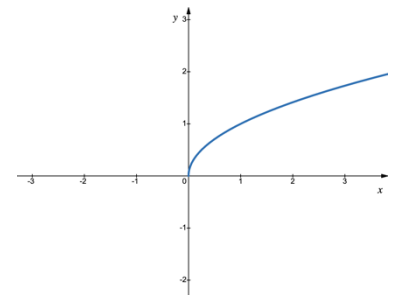
7. b



8. g



9. a



10. f