

# 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.

Ture 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*

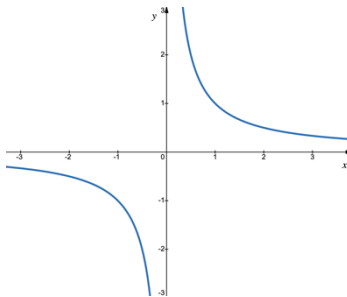
Pair the functions with the given graphs:

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

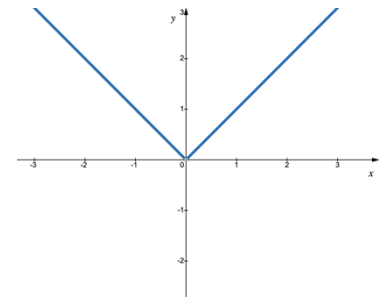
(b)  $f(x) = |x|$ .              (f)  $f(x) = \sqrt{x}$ .

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

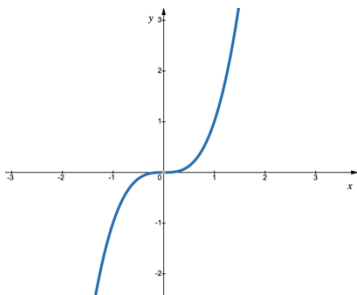
(d)  $f(x) = \frac{1}{x}$ .                (h)  $f(x) = \sqrt[3]{x}$ .



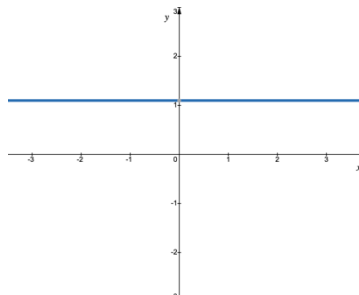
6. d



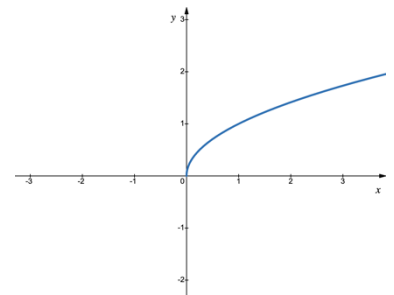
7. b



8. g



9. a



10. f