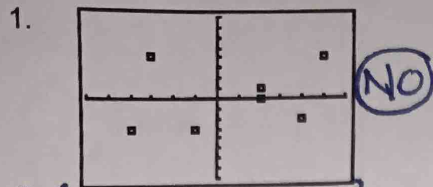


DOMAIN and RANGE I

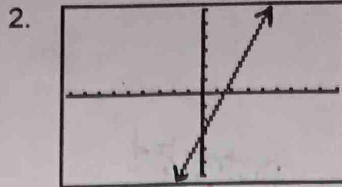
Name Master G
 Date _____ Block _____

- State whether each relation is a function.
- State each domain and range. For #16-21 use the graphing calculator to view the graph.



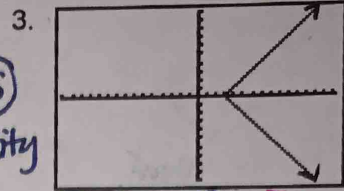
D: $\{-4, -3, -1, 2, 4, 5\}$
 R: $\{-3, -2, 0, 1, 4\}$

NO



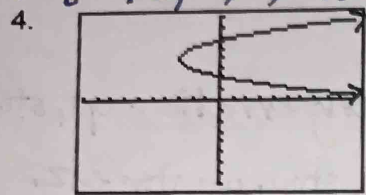
D: $\mathbb{R} \quad (-\infty, \infty)$
 R: $\mathbb{R} \quad (-\infty, \infty)$

YES
Identity



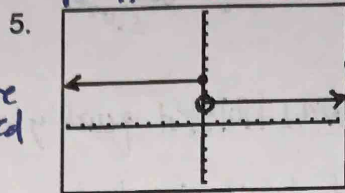
D: $x \geq 3 \quad [3, \infty)$
 R: $\mathbb{R} \quad (-\infty, \infty)$

NO
Ab. Value rotated



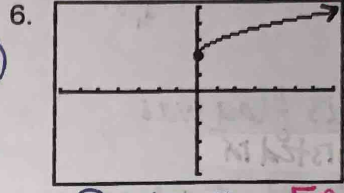
D: $x \geq -3 \quad [-3, \infty)$
 R: $\mathbb{R} \quad (-\infty, \infty)$

NO
square rotated



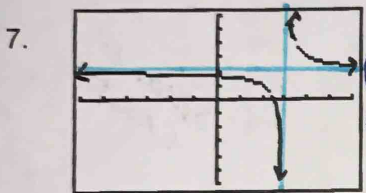
D: $\mathbb{R} \quad (-\infty, \infty)$
 R: $\{2, 4\}$

YES



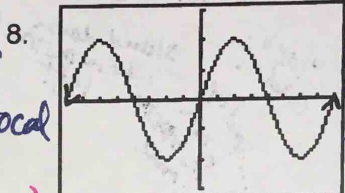
D: $x \geq 0 \quad [0, \infty)$
 R: $y \geq 2 \quad [2, \infty)$

YES
Square Root



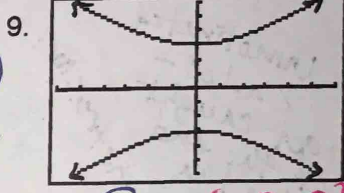
D: $\mathbb{R}, x \neq 3 \quad (-\infty, 3) \cup (3, \infty)$
 R: $\mathbb{R}, y \neq 2 \quad (-\infty, 2) \cup (2, \infty)$

YES
Reciprocal



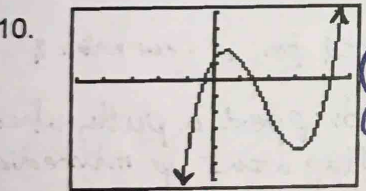
D: $\mathbb{R} \quad (-\infty, \infty)$
 R: $-2 \leq y \leq 2 \quad [-2, 2]$

YES
Sine



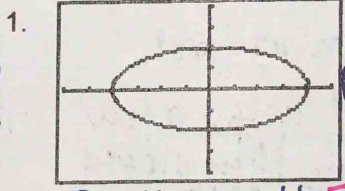
D: $\mathbb{R} \quad (-\infty, \infty)$
 R: $y \leq -3$ or $y \geq 3 \quad (-\infty, -3] \cup [3, \infty)$

NO



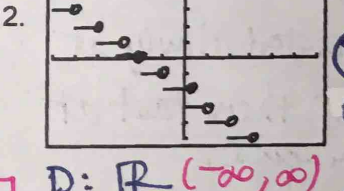
D: $\mathbb{R} \quad (-\infty, \infty)$
 R: $\mathbb{R} \quad (-\infty, \infty)$

YES
Cubic



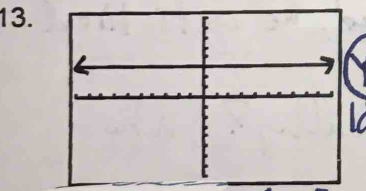
D: $-4 \leq x \leq 4 \quad [-4, 4]$
 R: $-2 \leq y \leq 2 \quad [-2, 2]$

NO



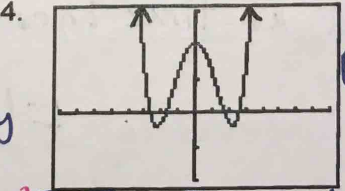
D: $\mathbb{R} \quad (-\infty, \infty)$
 R: \mathbb{Z} (the set of all integers)

YES
Greatest Integer



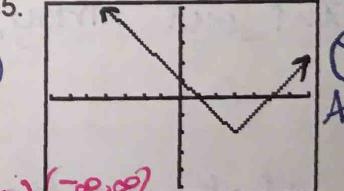
D: $\mathbb{R} \quad (-\infty, \infty)$
 R: $\{3\}$

YES
Identity



D: $\mathbb{R} \quad (-\infty, \infty)$
 R: $y \geq -\frac{1}{2} \quad [-\frac{1}{2}, \infty)$

YES



D: $\mathbb{R} \quad (-\infty, \infty)$
 R: $y \geq -2 \quad [-2, \infty)$

YES
Ab. value

16. $y = (x+2)^2 - 3$ YES
 D: \mathbb{R} , R: $y \geq -3$ square

17. $y = -\sqrt{x-2}$ YES Square Root
 D: $x \geq 2$, R: $y \leq 0$

18. $y = -|x| + 3$ YES Ab. value
 D: \mathbb{R} , R: $y \leq 3$

19. $y = \frac{1}{x+2}$ YES Reciprocal
 D: $\mathbb{R}, x \neq -2$, R: $y \neq 0$

20. $y = -x(x-4)^3$ YES Cubic
 D: \mathbb{R} , R: \mathbb{R}

21. $y = 2x - 4$ YES Identity
 D: \mathbb{R} , R: \mathbb{R}