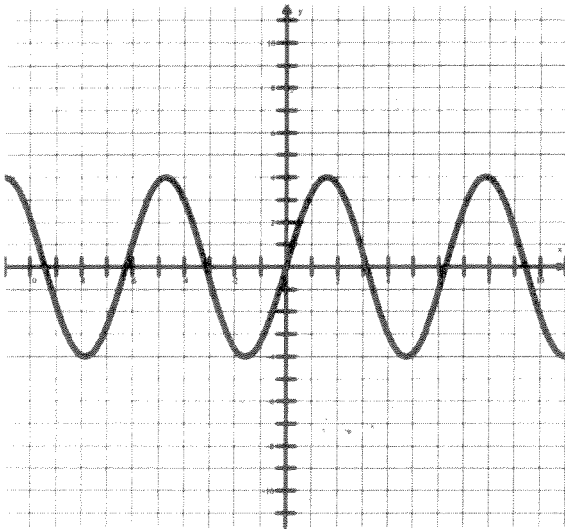


Domain and Range

Name Master E
 Date _____ Block _____

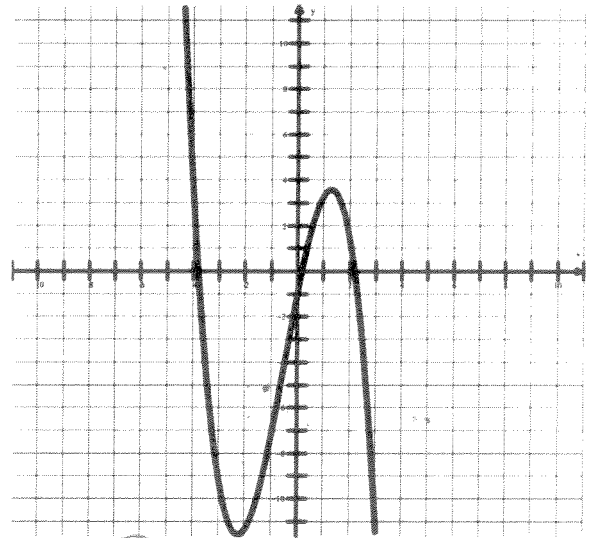
State the domain and range for each graph using set builder notation and interval notation.

1.



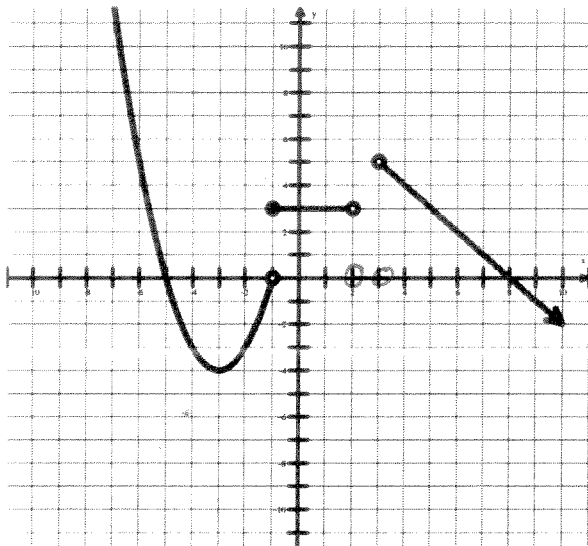
Domain: \mathbb{R}
 $(-\infty, \infty)$
 Range: $-4 \leq y \leq 4$
 $[-4, 4]$

2.



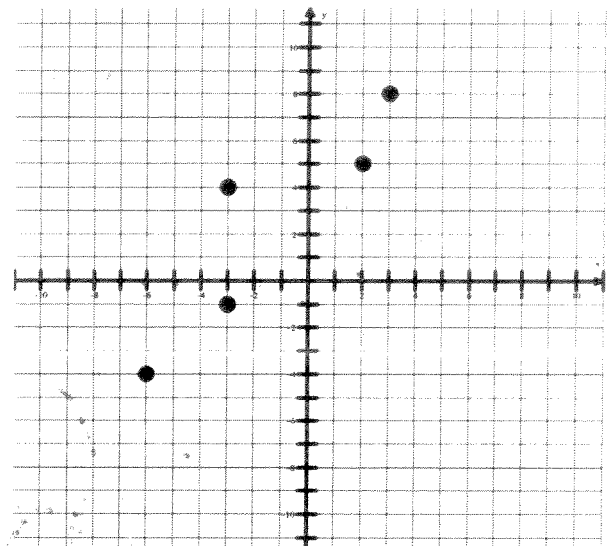
Domain: \mathbb{R}
 $(-\infty, \infty)$
 Range: \mathbb{R}
 $(-\infty, \infty)$

3.



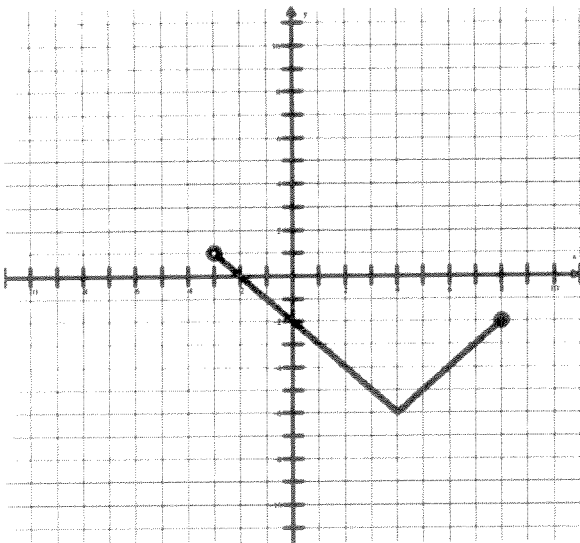
Domain: $x < 2$ or $x > 3$
 $(-\infty, 2) \cup (3, \infty)$
 Range: \mathbb{R}
 $(-\infty, \infty)$

4.



Domain: $\{-6, -3, 2, 3\}$
same
 Range: $\{-4, -1, 4, 5, 0\}$
same

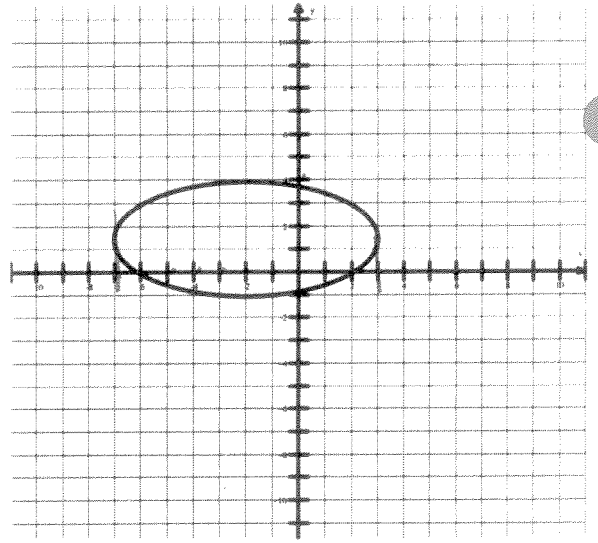
5.



Domain: $-3 < x \leq 8$
 $(-3, 8]$

Range: $-6 \leq y < 1$
 $[-6, 1)$

6.



Domain: $-7 \leq x \leq 3$
 $[-7, 3]$

Range: $-1 \leq y \leq 4$
 $[-1, 4]$

.....
State the domain and range of each function using set builder notation and interval notation.
Do NOT use a calculator.

7. $y = -3(x - 2)^2 + 5$



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

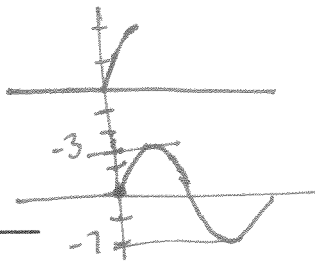
Range: $y \leq 5$
 $(-\infty, 5]$

8. $y = 2x - 7$

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

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

9. $y = 2 \sin(x) - 5$



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

Range: $-7 \leq y \leq -3$
 $[-7, -3]$

10. $y = -|x| + 2$



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

Range: $y \leq 2$
 $(-\infty, 2]$