HW 2-3 HONORS: Domain, Range, & Continuity

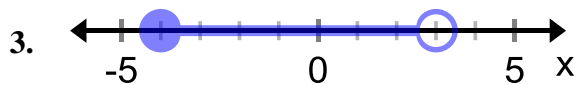**Identify the domain for each graph in BOTH <u>set builder</u> and <u>interval notation</u>.**

1.
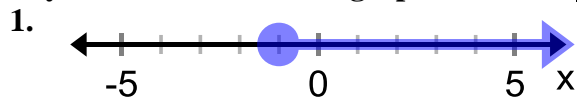
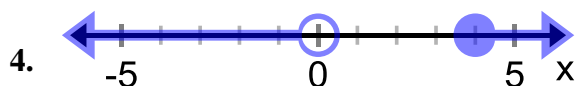<u>Domain:</u>

Set Builder: $x \geq -1$

Interval: $[-1, \infty)$

2.

<u>Domain:</u>

Set Builder:

Interval:

3.
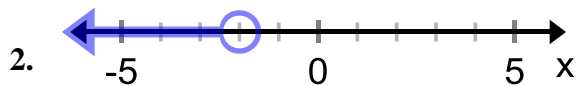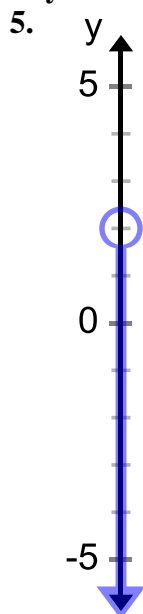
<u>Domain:</u>

Set Builder: $-4 \leq x < 3$
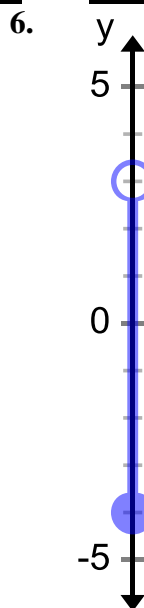
Interval: $[-4, 3)$

4.

<u>Domain:</u>

Set Builder:

Interval:

Identify the range for each graph using BOTH <u>set builder</u> and <u>interval notation</u>.

5.

<u>Range:</u>

Set Builder:

$y < 2$

Interval:

$(-\infty, 2)$

6.

<u>Range:</u>

Set Builder:

Interval:

Identify the domain, range, and continuity for each graph using <u>set builder</u> and <u>interval notation</u>.
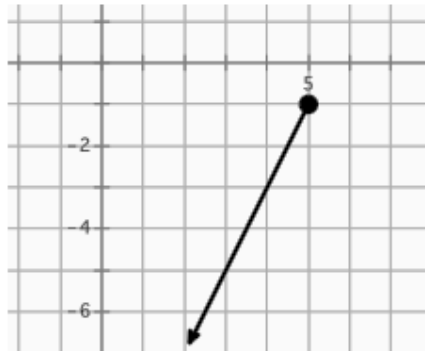
7. <u>Domain</u>

Set Builder:

$x \leq 5$

Interval:

$(-\infty, 5]$

8. <u>Range</u>

Set Builder:

Interval:

9. <u>Continuity</u> (circle your answer)

(Continuous)   Non-Continuous   Discrete

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10. <u>Domain</u>
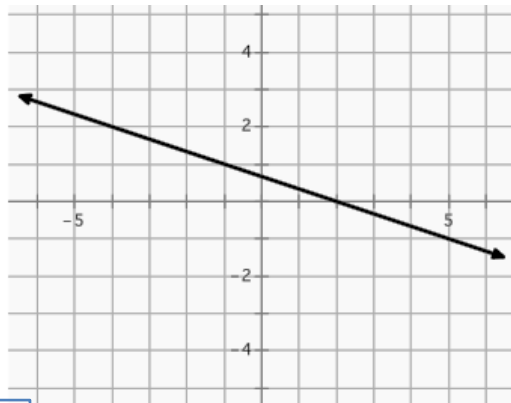
Set Builder:

Interval:

11. <u>Range</u>

Set Builder:
All Real Numbers

Interval:

12. <u>Continuity</u> (circle your answer)

Continuous   Non-Continuous   Discrete
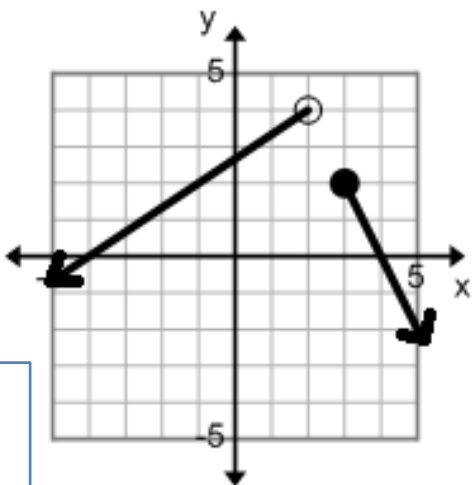
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13. <u>Domain</u>

Set Builder:

Interval:
$(-\infty, 2)$ **and** $[3, \infty)$

14. <u>Range</u>

Set Builder:

Interval:
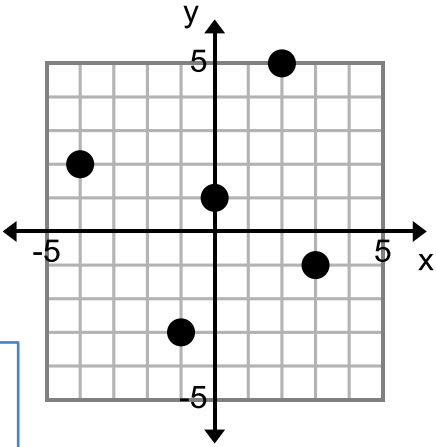
15. <u>Continuity</u> (circle your answer)

Continuous   (Non-Continuous)   Discrete

Identify the domain, range, and continuity for each graph using <u>set builder</u> notation.
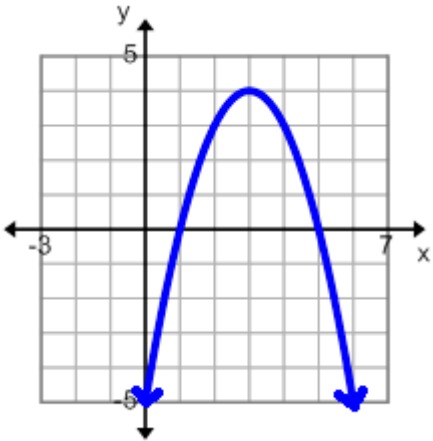
16. <u>Domain</u>

Set Builder:

17. <u>Range</u>

Set Builder:

$$\{-3,-1,1,2,5\}$$

18. <u>Continuity</u> (circle your answer)

Continuous   Non-Continuous   Discrete

19. <u>Domain</u>

Set Builder:

Interval:

20. <u>Range</u>

Set Builder:

Interval:

$$(-\infty,\infty)$$

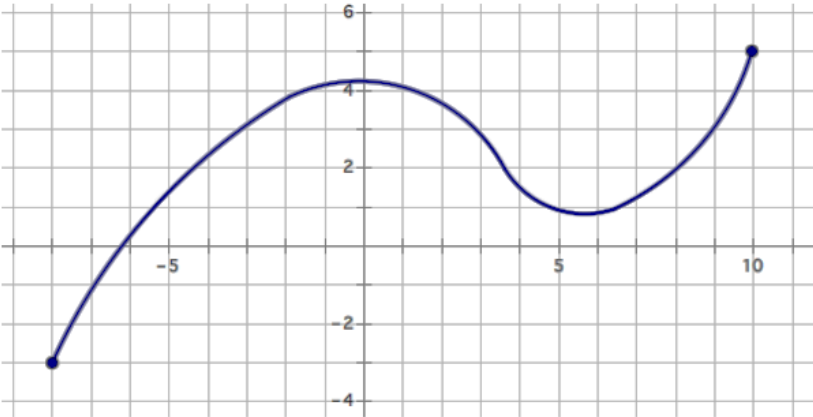**21.** <u>Continuity</u> (circle your answer)

Continuous   Non-Continuous   Discrete

22. <u>Domain</u>

Set Builder:

Interval:

23. <u>Range</u>

Set Builder: $-3 \le y \le 5$

Interval:

24. <u>Continuity</u> (circle your answer)

Continuous

Non-Continuous

Discrete

Identify the domain, range, and continuity for each graph using <u>set builder</u> and <u>interval notation</u>.

25. <u>Domain</u> Set Builder: Interval: $[0,21]$	**26.** <u>Range</u> Set Builder: Interval:	**27.** <u>Continuity</u> (Circle your answer) Continuous Non-Continuous Discrete