

## Domain and Range Graphs HW

$$\textcircled{1} \begin{cases} \{x \mid 0 \leq x \leq 4\} \\ \{y \mid 0 \leq y \leq 4\} \end{cases} \quad \begin{array}{l} D: [0, 4] \\ R: [0, 4] \end{array}$$

$$\textcircled{2} \begin{cases} \{x \mid \mathbb{R}\} \\ \{y \mid \mathbb{R}\} \end{cases} \quad \begin{array}{l} D: [-\infty, \infty] \\ R: [-\infty, \infty] \end{array}$$

$$\textcircled{3} \begin{cases} \{x \mid -3 \leq x < \infty\} \\ \{y \mid -3 \leq y \leq 4\} \end{cases} \quad \begin{array}{l} D: [-3, \infty) \\ R: [-3, 4] \end{array}$$

$$\textcircled{4} \begin{cases} \{x \mid -5 \leq x \leq 0\} \\ \{y \mid -6 \leq y \leq -2\} \end{cases} \quad \begin{array}{l} D: [-5, 0] \\ R: [-6, -2] \end{array}$$

$$\textcircled{5} \begin{array}{l} \text{Domain: } \{-3, -2, -1, 0, 1, 2\} \\ \text{Range: } \{-1, 0, 1, 2, 3, 4\} \end{array}$$

$$\textcircled{6} \begin{cases} \{x \mid -2 < x < \infty\} \\ \{y \mid y = -1\} \end{cases} \quad \begin{array}{l} D: (-2, \infty) \\ R: [-1, -1] \end{array}$$

$$\textcircled{7} \begin{cases} \{x \mid \mathbb{R}\} \\ \{y \mid -2 \leq y < \infty\} \end{cases} \quad \begin{array}{l} D: (-\infty, \infty) \\ R: [-2, \infty) \end{array}$$

$$\textcircled{8} \begin{cases} \{x \mid -3 \leq x \leq 3\} \\ \{y \mid -3 \leq y \leq 3\} \end{cases} \quad \begin{array}{l} D: [-3, 3] \\ R: [-3, 3] \end{array}$$

$\textcircled{9}$  DUPLICATE

$$\textcircled{10} \begin{array}{l} \text{Domain: } \{-3, -2, -1, 1\} \\ \text{Range: } \{-2, -1, 2, 3, 4\} \end{array}$$

$$\textcircled{11} \begin{cases} \{x \mid x = -3\} \\ \{y \mid \mathbb{R}\} \end{cases} \quad \begin{array}{l} D: [-3, -3] \\ R: (-\infty, \infty) \end{array}$$

$$\begin{aligned} \textcircled{12} \quad & \{x \mid -\infty < x \leq 2\} & D: & (-\infty, 2] \\ & \{y \mid -2 \leq y < \infty\} & R: & [-2, \infty) \end{aligned}$$

$$\begin{aligned} \textcircled{13} \quad & \{x \mid -3 < x \leq 2\} & D: & (-3, 2] \\ & \{y \mid -3 \leq y < 2\} & R: & [-3, 2) \end{aligned}$$

$$\begin{aligned} \textcircled{14} \quad & \{x \mid -4 \leq x \leq -1\} & D: & [-4, -1] \\ & \{y \mid -4 \leq y < \infty\} & R: & [-4, \infty) \end{aligned}$$

$$\begin{aligned} \textcircled{15} \quad & \{x \mid -1 \leq x \leq 5\} & D: & [-1, 5] \\ & \{y \mid -4 \leq y \leq 7\} & R: & [-4, 7] \end{aligned}$$

$$\begin{aligned} \textcircled{16} \quad & \{x \mid -4 \leq x \leq 0\} & D: & [-4, 0] \\ & \{y \mid 0 \leq y \leq 5\} & R: & [0, 5] \end{aligned}$$

$$\begin{aligned} \textcircled{17} \quad & \{x \mid \mathbb{R}\} & D: & (-\infty, \infty) \\ & \{y \mid \mathbb{R}\} & R: & (-\infty, \infty) \end{aligned}$$

$$\begin{aligned} \textcircled{18} \quad & \{x \mid -\infty < x \leq -1\} & D: & (-\infty, -1] \\ & \{y \mid \mathbb{R}\} & R: & (-\infty, \infty) \end{aligned}$$

$$\begin{aligned} \textcircled{19} \quad & \{x \mid -1 \leq x \leq 5\} & D: & [-1, 5] \\ & \{y \mid 0 \leq y \leq 3\} & R: & [0, 3] \end{aligned}$$

$$\begin{aligned} \textcircled{20} \quad & \{x \mid -7 < x < 6\} & D: & (-7, 6) \\ & \{y \mid -5 \leq y \leq 4\} & R: & [-5, 4] \end{aligned}$$

$$\begin{aligned} \textcircled{21} \quad & \text{Domain} = \{2\} \\ & \text{Range} = \{-1, 0, 1, 2, 3, 4\} \end{aligned}$$

$$\begin{aligned} \textcircled{22} \quad & \{x \mid -3 \leq x \leq -1\} & D: & [-3, -1] \\ & \{y \mid -4 \leq y < 4\} & R: & [-4, 4) \end{aligned}$$

$$\begin{array}{l} \textcircled{23} \{x | \mathbb{R}\} \\ \{y | -4 \leq y < \infty\} \end{array} \quad \begin{array}{l} D: (-\infty, \infty) \\ R: [-4, \infty) \end{array}$$

$$\begin{array}{l} \textcircled{24} \{x | 1 \leq x \leq 7\} \\ \{y | 0 \leq y \leq 4\} \end{array} \quad \begin{array}{l} D: [1, 7] \\ R: [0, 4] \end{array}$$

$$\begin{array}{l} \textcircled{25} \{x | -4 \leq x \leq 4\} \\ \{y | -4 \leq y \leq 1\} \end{array} \quad \begin{array}{l} D: [-4, 4] \\ R: [-4, 1] \end{array}$$

$$\begin{array}{l} \textcircled{26} \{x | -3 \leq x \leq 3\} \\ \{y | 0 \leq y \leq 3\} \end{array} \quad \begin{array}{l} D: [-3, 3] \\ R: [0, 3] \end{array}$$

$$\begin{array}{l} \textcircled{27} \{x | -6 \leq x \leq 5\} \\ \{y | -5 \leq y \leq 5\} \end{array} \quad \begin{array}{l} D: [-6, 5] \\ R: [-5, 5] \end{array}$$

BAD EXAMPLE  $\textcircled{28}$  X Don't do

$$\begin{array}{l} \textcircled{29} \text{Domain} = \{-3, -2, -1, 1, 2, 3\} \\ \text{Range} = \{-2\} \end{array}$$

$$\begin{array}{l} \textcircled{30} \{x | -3 \leq x \leq 1\} \\ \{y | -7 \leq y \leq 2\} \end{array} \quad \begin{array}{l} D: [-3, 1] \\ R: [-7, 2] \end{array}$$

$$\begin{array}{l} \textcircled{31} \{x | \mathbb{R}\} \\ \{y | \mathbb{R}\} \end{array} \quad \begin{array}{l} D: (-\infty, \infty) \\ R: (-\infty, \infty) \end{array}$$

$$\begin{array}{l} \textcircled{32} \{x | -5 \leq x \leq 3\} \\ \{y | -3 \leq y \leq 5\} \end{array} \quad \begin{array}{l} D: [-5, 3] \\ R: [-3, 5] \end{array}$$

