

1. $\{(1,2), (3,4), (5,6)\}$: state the domain.

Collect the x-values

Answer: $\{1, 3, 5\}$

2. $\{(1,2), (3,4), (5,6)\}$: state the range.

Collect the y-values

Answer: $\{2, 4, 6\}$

3. $\{(0,5), (2,5), (4,7)\}$: domain and range.

x: 0, 2, 4; y: 5, 7 (list repeats once)

Answer: D $\{0,2,4\}$; R $\{5,7\}$

4. Table: $x = 1..4$, $y = 10, 20, 30, 40$. Domain?

Inputs are 1, 2, 3, 4

Answer: $\{1, 2, 3, 4\}$

5. A line goes on forever in both directions. Domain?

Every x is allowed

Answer: All real numbers

6. $f(x) = x^2$. What is the range?

Squares are never negative

Answer: $y \geq 0$

7. $f(x) = x + 2$ with domain $\{1, 2, 3\}$. Find the range.

$f(1)=3$, $f(2)=4$, $f(3)=5$

Answer: $\{3, 4, 5\}$

8. Tickets cost \$9 each; you can buy up to 4. Domain of t (tickets)?

Whole tickets only, 0 through 4

Answer: $\{0, 1, 2, 3, 4\}$

9. $f(x) = |x| - 3$. State the range. ★ challenge

$|x| \geq 0$, so $|x| - 3 \geq -3$

Answer: $y \geq -3$

10. A ball's height $h(t)$ is graphed from $t = 0$ to $t = 4$ s, max 64 ft, ends at 0. Domain and range in context?

Time runs 0 to 4

Height runs 0 up to 64

Answer: D: $0 \leq t \leq 4$; R: $0 \leq h \leq 64$