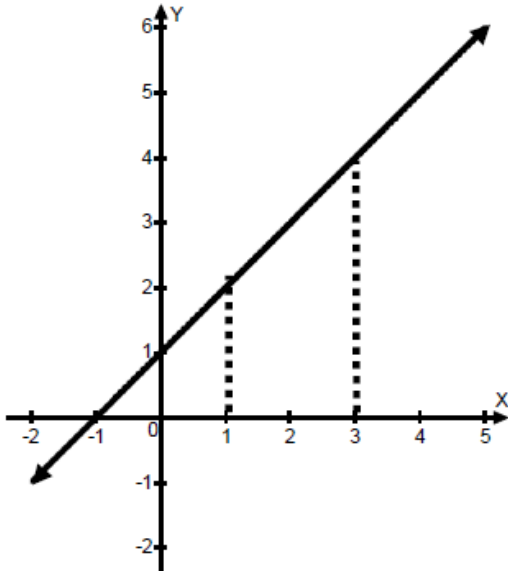


NAME _____ DATE _____ PER. _____

AREA UNDER A CURVE

For the given interval, determine the area between the graph of the given function and the x-axis

1. Interval: $1 \leq x \leq 3$
 Function: $y = x + 1$

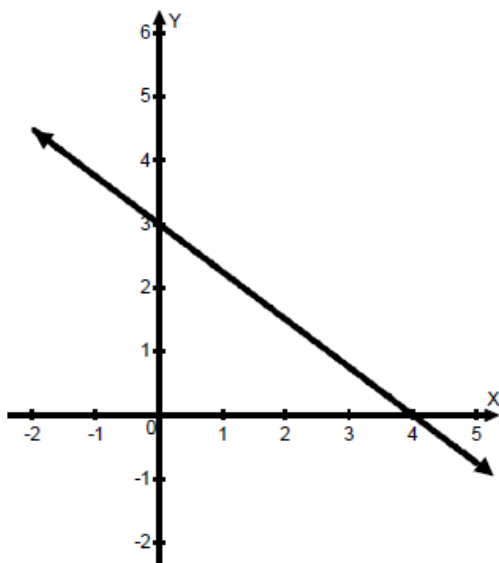


Show calculations here:

Total Area: _____

Net Area: _____

2. Interval: $-1 \leq x \leq 3$
 Function: $y = -\frac{3}{4}x + 3$

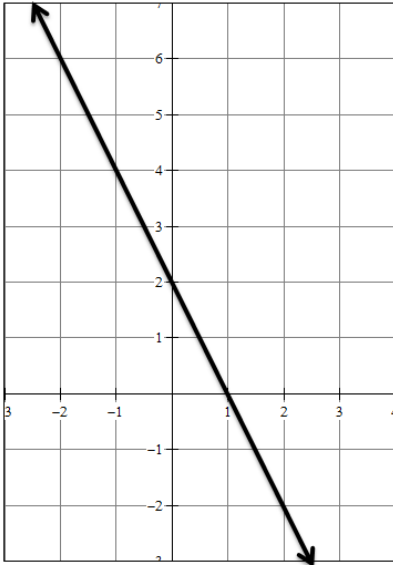


Show calculations here:

Total Area: _____

Net Area: _____

3. Interval: $-2 \leq x \leq 2$
 Function: $y = -2x + 2$

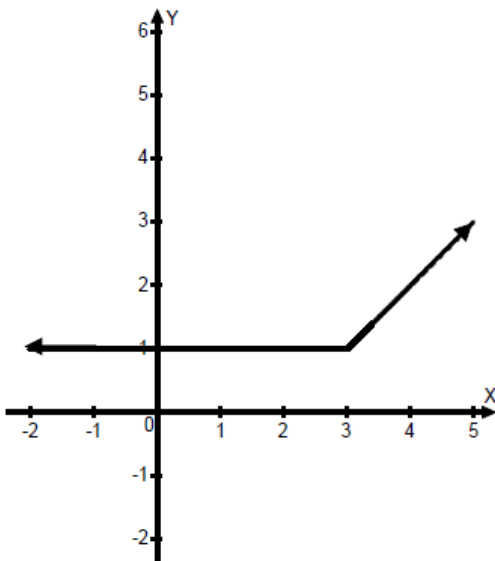


Show calculations here:

Total Area: _____

Net Area: _____

4. Interval: $0 \leq x \leq 5$
 Function: $f(x) = \begin{cases} 1, & x \leq 3 \\ x-2, & x \geq 3 \end{cases}$



Show calculations here:

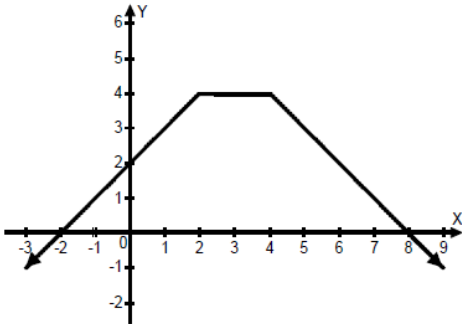
Total Area: _____

Net Area: _____

5.

Interval: $0 \leq x \leq 8$

$$\text{Function: } f(x) = \begin{cases} x+2, & x \leq 2 \\ 4, & 2 \leq x \leq 4 \\ 8-x, & x \geq 4 \end{cases}$$



Show calculations here:

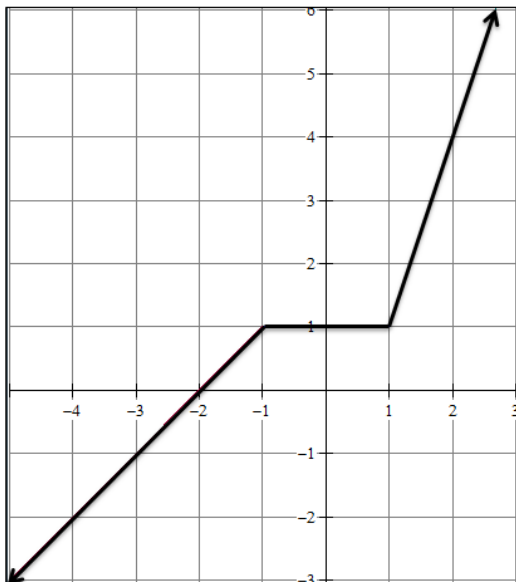
Total Area: _____

Net Area: _____

6.

Interval: $-4 \leq x \leq 2$

$$\text{Function: } f(x) = \begin{cases} x+2, & x \leq -1 \\ 1, & -1 \leq x \leq 1 \\ 3x-2, & x \geq 1 \end{cases}$$

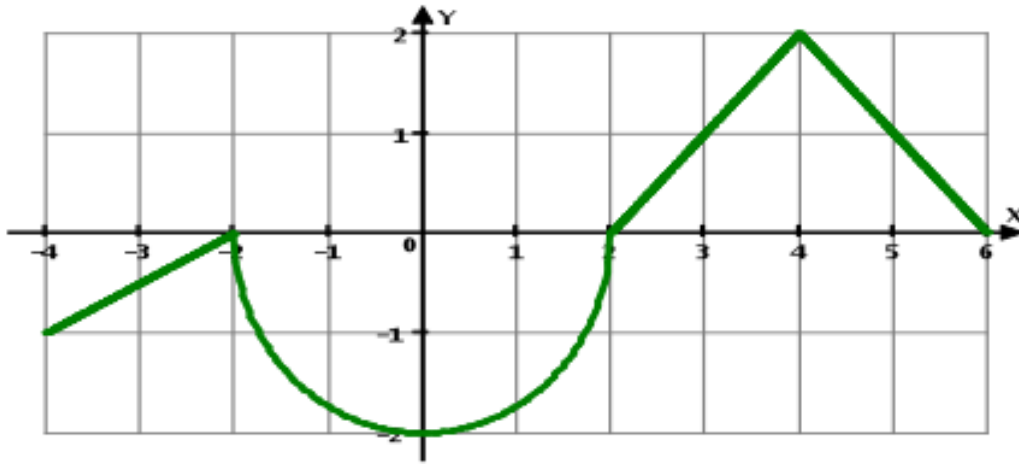


Show calculations here:

Total Area: _____

Net Area: _____

7. Find the Total Area and Net Area under the curve from $-4 \leq x \leq 6$

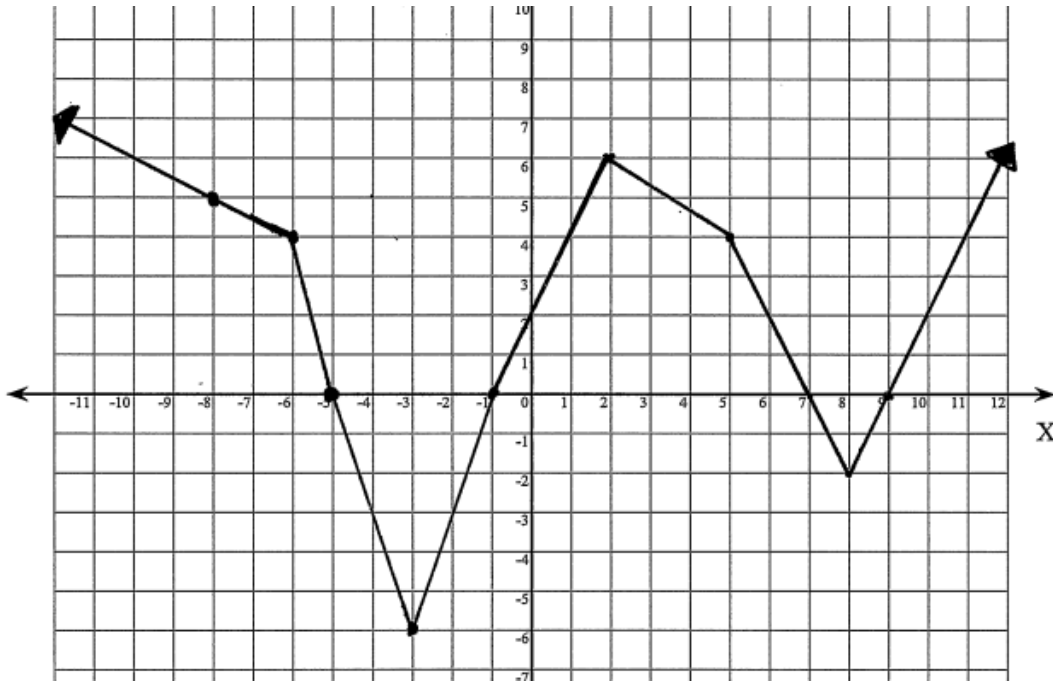


SHOW ALL CALCULATIONS BELOW:

TOTAL AREA = _____

NET AREA = _____

8. Find the Total Area and Net Area under the curve from $-8 \leq x \leq 9$

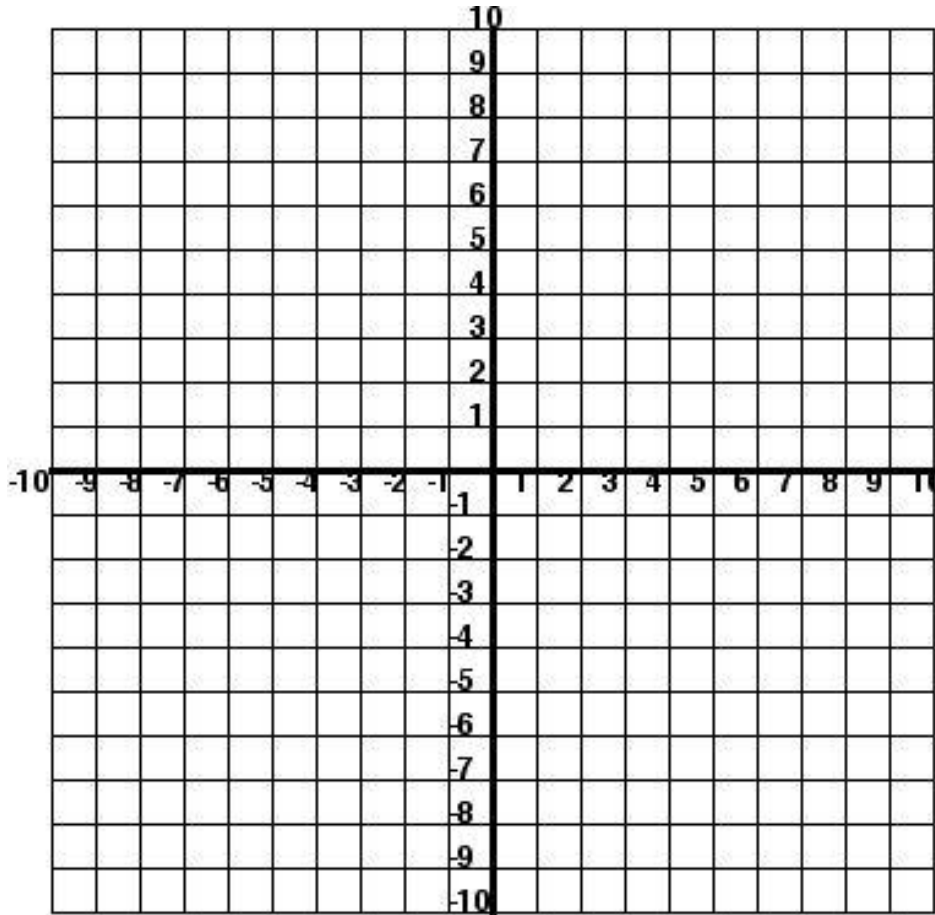


HOW ALL CALCULATIONS BELOW:

TOTAL AREA = _____

NET AREA = _____

9. Graph the line $y = \frac{-2}{3}x - 2$, Find the Total Area and Net Area under the curve from $-6 \leq x \leq 6$



SHOW ALL CALCULATIONS BELOW:

TOTAL AREA = _____

NET AREA = _____