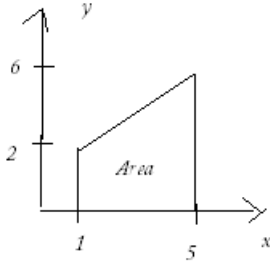


**Sheet #107: All you need to know before taking Calculus? GNAV.**

- Find  $\sum_{i=1}^5 (1+i)$ . If this means nothing to you, go on to Question 2.
- Find the area of the enclosed region.



- Find  $\frac{2x}{5x}$ .
- Find  $\frac{2x+1}{5x+1}$  when  $x = 0$ .
- Find  $\frac{2x}{5x}$  when  $x = 0$ .
- Verbal questions:
  - Consider the answer to Question 2. How can you find such areas without breaking up the region into triangles and rectangles?
  - Consider the answer to Question 1. What is the formula for arithmetic sums like in Question 1? How is it related to the formula for the area of right-angle trapezoids like in Question 2?
  - How do you reconcile your answers to Questions 1 and 2?
  - Consider your answer in Question 5. How do you reconcile the answer to that question and with the answer to Question 3?
  - Graph  $y = \frac{2x}{5x}$ . [ZOOM] 4:Decimal. Use [2nd] [ZOOM/FORMAT] AxesOff. Then [GRAPH]. How can students get a parabola by mistake? Investigate the graph and table. Use [TRACE]. Use [2nd] [GRAPH/TABLE]. When  $x = 0$ , what do you see on the graph, in the trace and in the table? Why?

**When done, [2nd] [+ / MEM] 722 Reset Defaults.**