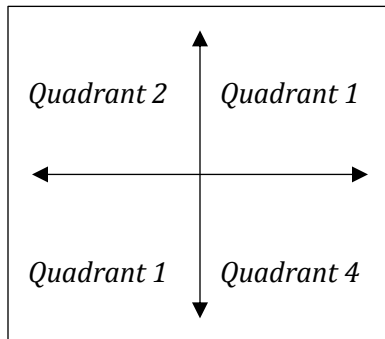


This book has permission to use the "N&K method of COLORS".

28) Question: Graph the following inequalities in the xy-plane below. Which quadrant does NOT contain any solutions to the inequalities given below?

$$y \geq \frac{3}{5}x + 4$$
$$y > 3x + 2$$

- A) Quadrant 1
- B) Quadrant 2
- C) Quadrant 3
- D) Quadrant 4



Solution:

$$y \geq \frac{3}{5}x + 4 \quad \text{inequality \#1}$$
$$y > 3x + 2 \quad \text{inequality \#2}$$

The solution for inequality #1 is spread in quadrants 1, 2 & 3.
The solution for inequality #2 is spread in quadrants 1, 2 & 3.

i.e.
The solutions for inequality #s 1 & 2 do NOT lie in Quadrant 4. Answer (D).

