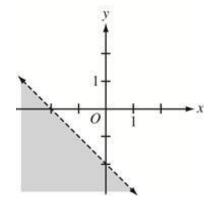
## **DOK 1:**

1. Which pair of values for x and y will not satisfy the following system?

$$y < 2x - 1$$

$$y > x - 1$$

- a) (6, 6)
- b) (5, 7)
- c) (1, 1)
- d) (3, 4)



2. Which of the following inequalities describes the shaded region in the graph below?

a) 
$$y < x - 2$$

b) 
$$y > x - 2$$

c) 
$$y < -x - 2$$

d) 
$$y > -x - 2$$

3. A system of inequalities is shown below.

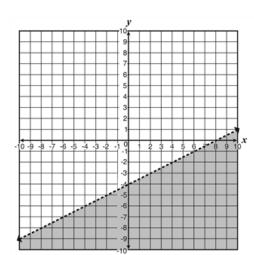
$$-4x + 3y < 6$$

$$y > -2x + 3$$

Which point is a solution to the system?

- a) (-3, 10)
- b) (-1, 5)
- c) (-1, 2)
- d) (5, -2)

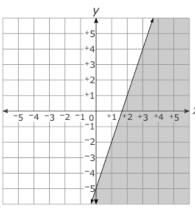
## **DOK 2:**



- Which inequality models this graph? 1.
- x 2y > 8a)
- b) x + 2y < -8
- c)  $y > \frac{1}{2}x 4$ d)  $y \ge \frac{1}{2}x 4$

must

times



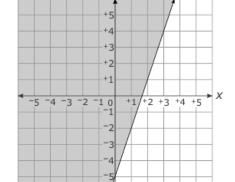
2. Which is the graph of the inequality in which y be at least 5

b)

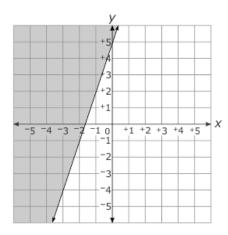
greater than 3

**x**?

a)



c)



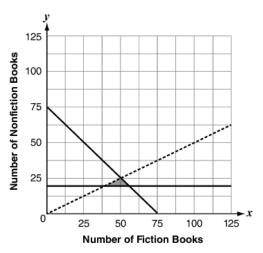
3. The saved

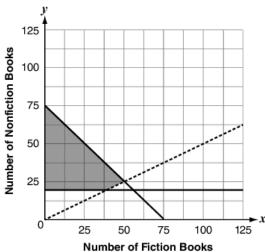
volleyball team at Clarksville High School has up \$460, and the team plans to spend no more

than that amount on balls and nets. A volleyball costs \$10 and a net costs\$15.

Select the inequality in standard form that describes this situation. Use the given numbers and the following variables.

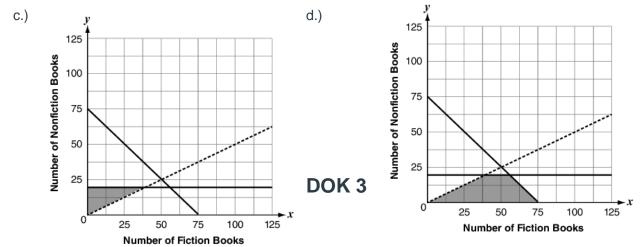
- x= the number of volleyballs
- y= the number of nets
- a) 10x + 15y < 460
- b)  $10x + 15y \le 460$
- c) 15x + 10y < 460
- d)  $15x + 10y \le 460$
- 4. A library is purchasing new fiction and nonfiction books. The library will purchase no more than 75 books all together. At least 20 of these books will be nonfiction and the number of fiction books will be less than twice as many nonfiction books. Which of these graphs shows the possible combinations of fiction, x, and nonfiction books, y, that the library will





purchase

a)



https://drive.google.com/file/d/0B56WK2j--

wrWMWg2RUctREE5bmM/view?usp=sharing

\*\*Including the "EXTRA" at the end of the sheet

## DOK 4

- 1. A t-shirt company makes t-shirts and hoodies. They can make between 80 and 100 t-shirts in one day. They can produce between 50 and 80 hoodies in one day. They can make, at most, 160 total units in one day. If the profit on each t-shirt is \$6 and the profit on each hoodie is \$10, how many of each kind do they need to make a maximum profit? What will this maximum profit be?
- 2. Your school has contracted with a professional magician to perform at the school. The school has guaranteed an attendance of at least 1000 and total ticket receipts of at least \$4800. The tickets for students are \$4 for students and \$6 for non-students, of which the magician receives \$2.50 and \$4.50 profit respectively. What is the minimum amount of money the magician could receive?
- 3. <a href="https://drive.google.com/file/d/0B56WK2j--">https://drive.google.com/file/d/0B56WK2j--</a> wrWOUM2NzhFWmFMUmc/view?usp=sharing