

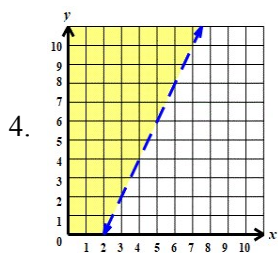
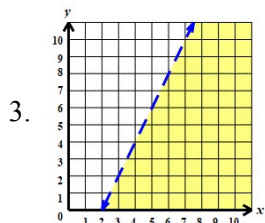
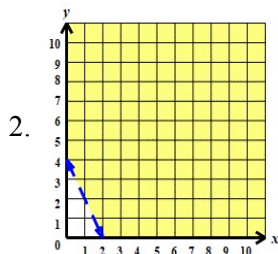
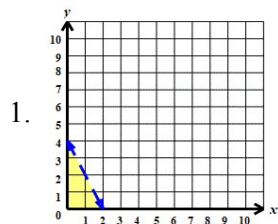
Name: _____

1. The math department needs to buy new textbooks and laptops for the computer science classroom. The textbooks cost \$116.00 each, and the laptops cost \$439.00 each. If the math department has \$6500 to spend and purchases 30 textbooks, how many laptops can they buy?

1. 6 2. 7
3. 11 4. 12

2. In which graph does the shaded region represent the solution set for the inequality shown below?

$$2x - y < 4$$



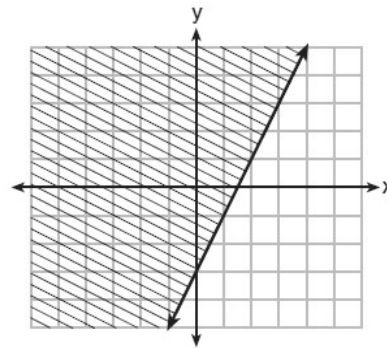
3. Joy wants to buy strawberries and raspberries to bring to a party. Strawberries cost \$1.60 per pound and raspberries cost \$1.75 per pound. If she only has \$10 to spend on berries, which inequality represents the situation where she buys x pounds of strawberries and y pounds of raspberries?

1. $1.60x + 1.75y \leq 10$
2. $1.60x + 1.75y \geq 10$
3. $1.75x + 1.60y \leq 10$
4. $1.75x + 1.60y \geq 10$

4. What is the solution to the inequality $2 + \frac{4}{9}x \geq 4 + x$?

1. $x \leq -\frac{18}{5}$
2. $x \geq -\frac{18}{5}$
3. $x \leq \frac{54}{5}$
4. $x \geq \frac{54}{5}$

5. Which inequality is represented by the graph below?



1. $y \leq 2x - 3$
2. $y \geq 2x - 3$
3. $y \leq -3x + 2$
4. $y \geq -3x + 2$

6. What is the solution of $4x - 30 \geq -3x + 12$?

1. $x \geq 6$ 2. $x \leq 6$
3. $x \geq -6$ 4. $x \leq -6$

7. Which ordered pair is *not* in the solution set of $y > 2x + 1$?

1. (1,4) 2. (1,6)
3. (3,8) 4. (2,5)

Answer Key for inequalities

Question 1: 1

Question 4: 1

Question 7: 4

Question 2: 4

Question 5: 2

Question 3: 1

Question 6: 1