Valentina bought two containers of beads. In the first container 30% of the beads are red, and in the second container 70% of the beads are red. Together, the containers have at least 400 red beads. Which inequality shows this relationship, where x is the total number of beads in the first container and y is the total number of beads in the second container?

A. $0.3x + 0.7y \geq 400$

B. $0.7x + 0.3y \leq 400$

C. $\dfrac{x}{3} + \dfrac{y}{7} \leq 400$

D. $30x + 70y \geq 400$

The total cost, in dollars, to rent a surfboard consists of a $\$25$ service fee and a $\$10$ per hour rental fee. A person rents a surfboard for t hours and intends to spend a maximum of $\$75$ to rent the surfboard. Which inequality represents this situation?

A. $10t \leq 75$

B. $10 + 25t \leq 75$

C. $25t \leq 75$

D. $25 + 10t \leq 75$

On a car trip, Rhett and Jessica each drove for part of the trip, and the total distance they drove was under 220 miles. Rhett drove at an average speed of $35 \text{ miles per hour (mph)}$, and Jessica drove at an average speed of 40 mph. Which of the following inequalities represents this situation, where r is the number of hours Rhett drove and j is the number of hours Jessica drove?

A. $35r + 40j > 220$

B. $35r + 40j < 220$

C. $40r + 35j > 220$

D. $40r + 35j < 220$

A bakery sells trays of cookies. Each tray contains at least 50 cookies but no more than 60. Which of the following could be the total number of cookies on 4 trays of cookies?
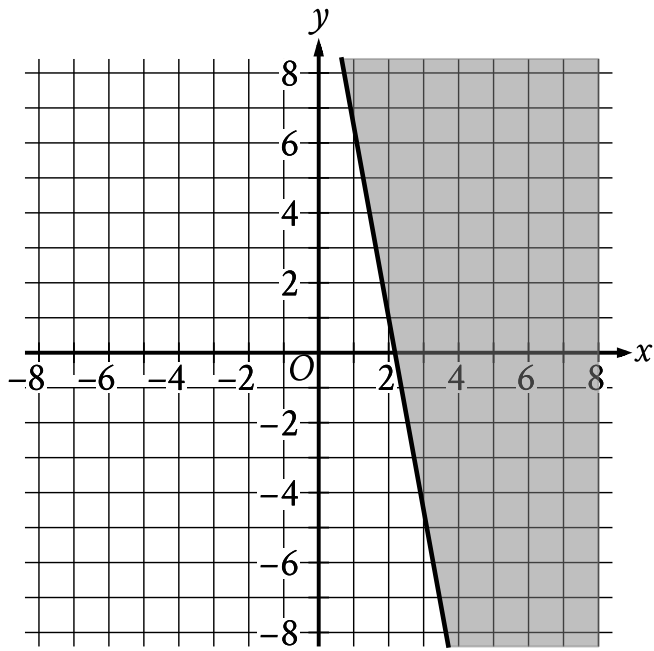
A. 165

B. 205

C. 245

D. 285

Tom scored 85, 78, and 98 on his first three exams in history class. Solving which inequality gives the score, G, on Tom's fourth exam that will result in a mean score on all four exams of at least 90 ?

A. $90-(85+78+98) \leq 4G$

B. $4G+85+78+98 \geq 360$

C. $\dfrac{(G+85+78+98)}{4} \geq 90$

D. $\dfrac{(85+78+98)}{4} \geq 90-4G$

The shaded region shown represents solutions to an inequality. Which ordered pair (x, y) is a solution to this inequality?

A. $(0, -4)$

B. $(0, 4)$

C. $(-4, 0)$

D. $(4, 0)$

Normal body temperature for an adult is between $97.8°F$ and $99°F$, inclusive. If Kevin, an adult male, has a body temperature that is considered to be normal, which of the following could be his body temperature?

A. $96.7°F$

B. $97.6°F$

C. $97.9°F$

D. $99.7°F$

Which of the following ordered pairs (x, y) satisfies the inequality $5x - 3y < 4$?

1. $(1, 1)$
2. $(2, 5)$
3. $(3, 2)$

A. I only

B. II only

C. I and II only

D. I and III only

A clothing store is having a sale on shirts and pants. During the sale, the cost of each shirt is $15 and the cost of each pair of pants is $25. Geoff can spend at most $120 at the store. If Geoff buys s shirts and p pairs of pants, which of the following must be true?

A. $15s + 25p \leq 120$

B. $15s + 25p \geq 120$

C. $25s + 15p \leq 120$

D. $25s + 15p \geq 120$

An elementary school teacher is ordering x workbooks and y sets of flash cards for a math class. The teacher must order at least 20 items, but the total cost of the order must not be over $80. If the workbooks cost $3 each and the flash cards cost $4 per set, which of the following systems of inequalities models this situation?

A.
$$x+y \geq 20$$
$$3x+4y \leq 80$$

B.
$$x+y \geq 20$$
$$3x+4y \geq 80$$

C.
$$3x+4y \leq 20$$
$$x+y \geq 80$$

D.
$$x+y \leq 20$$
$$3x+4y \geq 80$$

Maria plans to rent a boat. The boat rental costs $60 per hour, and she will also have to pay for a water safety course that costs $10. Maria wants to spend no more than $280 for the rental and the course. If the boat rental is available only for a whole number of hours, what is the maximum number of hours for which Maria can rent the boat?

Monarch butterflies can fly only with a body temperature of at least 55.0 degrees Fahrenheit $(°F)$. If a monarch butterfly's body temperature is $51.3°F$, what is the minimum increase needed in its body temperature, in $°F$, so that it can fly?

A. 1.3

B. 3.7

C. 5.0

D. 6.3

A cleaning service that cleans both offices and homes can clean at most 14 places per day. Which inequality represents this situation, where f is the number of offices and h is the number of homes?

A. $f + h \leq 14$

B. $f + h \geq 14$

C. $f - h \leq 14$

D. $f - h \geq 14$