Question ID 2c121b25

Assessment	Test	Domain	Skill	Difficulty
SAT	Math	Algebra	Linear inequalities in one or two variables	■□□

1.1

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. $30x + 70y \geq 400$

Question ID ee439cff

Assessment	Test	Domain	Skill	Difficulty
SAT	Math	Algebra	Linear inequalities in one or two variables	■□□

1.2

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. $40r + 35j < 220$

Question ID 563407e5

Assessment	Test	Domain	Skill	Difficulty
SAT	Math	Algebra	Linear inequalities in one or two variables	■☐☐

ID: 563407e5   1.3

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

Question ID df32b09c

Assessment	Test	Domain	Skill	Difficulty
SAT	Math	Algebra	Linear inequalities in one or two variables	■□□

ID: df32b09c

1.4

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

Question ID 915463e0

Assessment	Test	Domain	Skill	Difficulty
SAT	Math	Algebra	Linear inequalities in one or two variables	■☐☐

1.5

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. $99.7°F$

Question ID 89541f9b

Assessment	Test	Domain	Skill	Difficulty
SAT	Math	Algebra	Linear inequalities in one or two variables	■ □ □

1.6

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

Question ID 84d0d07e

Assessment	Test	Domain	Skill	Difficulty
SAT	Math	Algebra	Linear inequalities in one or two variables	■☐☐

ID: 84d0d07e   1.7

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. $25s + 15p \geq 120$

Question ID e744499e

Assessment	Test	Domain	Skill	Difficulty
SAT	Math	Algebra	Linear inequalities in one or two variables	■☐☐

1.8

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

Question ID b75f7812

Assessment	Test	Domain	Skill	Difficulty
SAT	Math	Algebra	Linear inequalities in one or two variables	■ ☐ ☐

ID: b75f7812

1.9

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?

Question ID 72a5fd28

Assessment	Test	Domain	Skill	Difficulty
SAT	Math	Algebra	Linear inequalities in one or two variables	■ ☐ ☐

ID: 72a5fd28

1.10

For a party, 50 dinner rolls are needed. Dinner rolls are sold in packages of 12. What is the minimum number of packages that should be bought for the party?

Question ID 86f7483f

Assessment	Test	Domain	Skill	Difficulty
SAT	Math	Algebra	Linear inequalities in one or two variables	■□□

ID: 86f7483f

1.11

During spring migration, a dragonfly traveled a minimum of $1,510$ miles and a maximum of $4,130$ miles between stopover locations. Which inequality represents this situation, where d is a possible distance, in miles, this dragonfly traveled between stopover locations during spring migration?

A. $d \leq 1,510$

B. $1,510 \leq d \leq 4,130$

C. $d \geq 4,130$

D. $4,130 \leq d \leq 5,640$