Question ID a26fed41

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

ID: a26fed41

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 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 6dc8c2cd

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

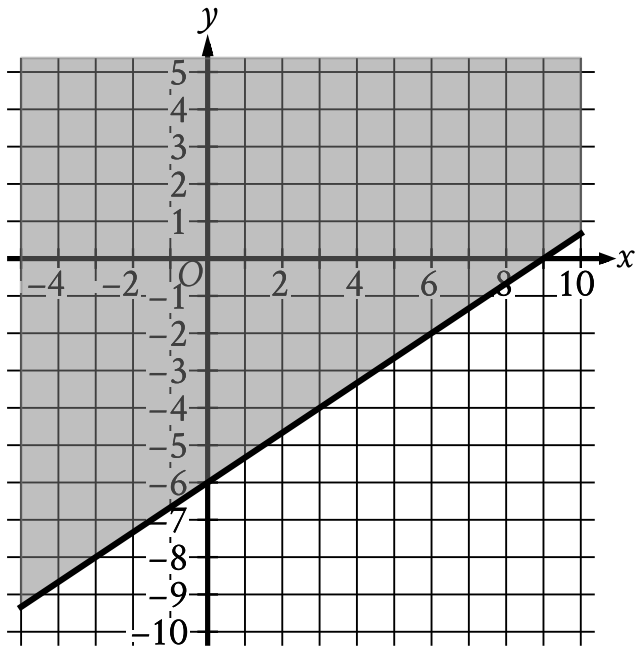
ID: 6dc8c2cd

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 741da959

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

ID: 741da959



The shaded region shown represents the solutions to which inequality?

A. $y \geq \frac{2}{3}x - 6$

B. $y \geq \frac{2}{3}x + 6$

C. $y \geq \frac{2}{3}x - 9$

D. $y \geq \frac{2}{3}x + 9$

Question ID d6a4f60f

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

ID: d6a4f60f

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. $4{,}130 \leq d \leq 5{,}640$

Question ID f1a5302a

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

ID: f1a5302a

A geologist estimates that the volume of a slab of granite is greater than 12.7 cubic feet but less than 15.7 cubic feet. The geologist also estimates that the slab of granite weighs 165 pounds per cubic foot of volume. Which inequality represents this situation, where x represents the estimated total weight, in pounds, of the slab of granite?

A. $165 - 15.7 < x < 165 - 12.7$

B. $165 + 12.7 < x < 165 + 15.7$

C. $165(12.7) < x < 165(15.7)$

D. $\frac{165}{15.7} < x < \frac{165}{12.7}$

Question ID ae4f73e4

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

ID: ae4f73e4

During a portion of a flight, a small airplane's cruising speed varied between 150 miles per hour and 170 miles per hour. Which inequality best represents this situation, where s is the cruising speed, in miles per hour, during this portion of the flight?

A. $s \leq 20$

B. $s \leq 150$

C. $s \leq 170$

D. $150 \leq s \leq 170$

Question ID c5380c0c

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

ID: c5380c0c

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. $25 + 10t \leq 75$

Question ID 831c2cb3

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

ID: 831c2cb3

The point $(8, 2)$ in the *xy*-plane is a solution to which of the following systems of inequalities?

A. $x > 0$
$y > 0$

B. $x > 0$
$y < 0$

C. $x < 0$
$y > 0$

D. $x < 0$
$y < 0$

Question ID b7dbe5b2

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

ID: b7dbe5b2

For a 3-week period in a town in Illinois, the lowest recorded temperature was 31 degrees Fahrenheit $(^\circ\mathrm{F})$ and the highest recorded temperature was $67^\circ\mathrm{F}$. Which inequality is true for any recorded temperature t, in $^\circ\mathrm{F}$, in this town for this 3-week period?

A. $t \geq 98$

B. $t \geq 67$

C. $31 \leq t \leq 67$

D. $t \leq 31$

Question ID bee774f4

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

ID: bee774f4

Ty set a goal to walk at least 24 kilometers every day to prepare for a multiday hike. On a certain day, Ty plans to walk at an average speed of 4 kilometers per hour. What is the minimum number of hours Ty must walk on that day to fulfill the daily goal?

A. 4

B. 6

C. 20

D. 24

Question ID 247a6ed7

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

ID: 247a6ed7

Julissa needs at least 100 hours of flight time to get her private pilot certification. If Julissa already has 86 hours of flight time, what is the minimum number of additional hours of flight time Julissa needs to get her private pilot certification?

A. 14

B. 76

C. 86

D. 186

Question ID 0f93d317

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

ID: 0f93d317

A geologist needs to collect at least 67 samples of lava from a volcano. If the geologist has already collected 63 samples from the volcano, what is the minimum number of additional samples the geologist needs to collect?

A. 130

B. 63

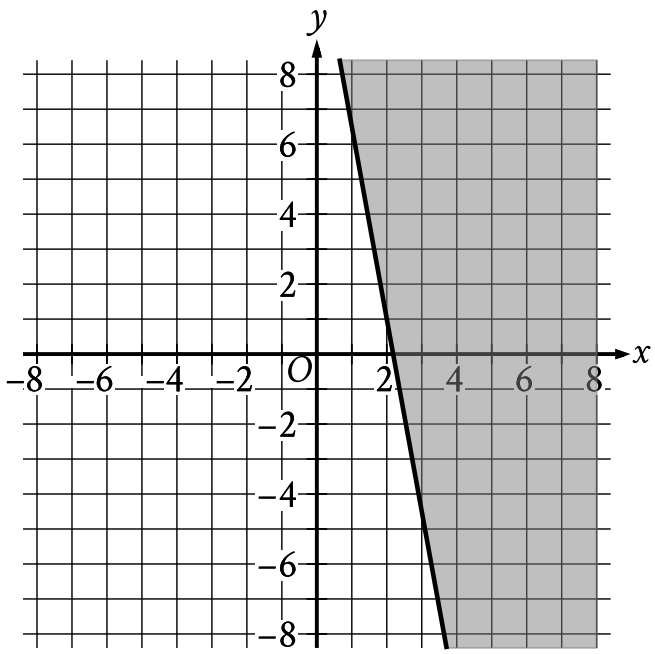
C. 4

D. 0

Question ID 6ecc2ab0

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

ID: 6ecc2ab0



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. $(4, 0)$

Question ID 1163d8e0

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

ID: 1163d8e0

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. $f - h \geq 14$

Question ID ad8d076e

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

ID: ad8d076e

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

A. 1.3

B. 3.7

C. 5.0

D. 6.3

Question ID 30d645b0

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

ID: 30d645b0

$$2\ell + 2w \leq 27$$

A rectangle has length ℓ and width w. The inequality gives the possible values of ℓ and w for which the perimeter of this rectangle is less than or equal to 27. Which statement is the best interpretation of $(\ell, w) = (8, 3)$ in this context?

A. If the rectangle has length 3 and width 8, its perimeter is less than or equal to 27.

B. If the rectangle has length 8 and width 3, its perimeter is less than or equal to 27.

C. If the rectangle has length 3 and width 8, its perimeter is greater than or equal to 27.

D. If the rectangle has length 8 and width 3, its perimeter is greater than or equal to 27.