

A1 SOL Packet #2c

Algebra 1 SOL Released Questions:

Solving Inequalities

Directions: Type an inequality in the box. Use the < or > for the inequality sign.

Solve for x :

$$-2x + 6 < x - 6$$

2013

Which inequality represents all the solutions of $9(4x - 8) < 4(6x + 9)$?

A $x < -3$

B $x > -3$

C $x < 9$

D $x > 9$

2013

Directions: Type an inequality in the box. Use the < and > for the inequality sign.

Solve for x :

$$6x - 11 - 13x < 7 - 5x$$

PIG 2009

An inequality is shown.

$$-2(x + 50) \geq 16$$

Which inequality is true because of the division property of inequality?

A $\frac{-2(x + 50)}{-2} \geq \frac{16}{-2}$

B $\frac{-2(x + 50)}{-2} \leq \frac{16}{-2}$

C $\frac{-2(x + 50)}{-2} \geq 16$

D $\frac{-2(x + 50)}{-2} \leq 16$

PIG 2009

What is the solution to the following inequality?

$$3(x - 3) \leq 3$$

A $x \leq 2$

B $x \geq 2$

C $x \leq 4$

D $x \geq 4$

2010

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Which inequality is equivalent to $4x - 2y \leq 8$?

- A $y \leq 2x - 4$
- B $y \geq 2x - 4$
- C $y \leq -2x - 4$
- D $y \geq -2x - 4$

2010

What is the solution to the inequality below?

$$2x - 7 \geq 15$$

- A $x \leq 8$
- B $x \geq 8$
- C $x \leq 11$
- D $x \geq 11$

2009

What is the solution to the following inequality?

$$6(x + 1) \geq 7$$

- F $x \geq \frac{13}{6}$
- G $x \geq \frac{1}{6}$
- H $x \geq 1$
- J $x \geq 6$

2008

What values of x make the following inequality true?

$$-3(x + 1) \leq 15$$

- A $x \geq 6$
- B $x \leq 6$
- C $x \geq -6$
- D $x \leq -6$

2007

A repairman estimated the cost of replacing a part in Mrs. James' computer would be at most \$225. The estimate included \$35 for the part, a \$40 service charge, and \$30 per hour for labor. What is the maximum number of hours the repairman estimated for the job?

- A $4\frac{1}{2}$
- B 5
- C $5\frac{1}{2}$
- D 6

2006

If $\frac{1}{4}x + 1 > \frac{15}{2}$, then —

- A $x > 26$
- B $x > 29$
- C $x > \frac{13}{2}$
- D $x > 28$

2006

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What is the solution to $8 - 2x \geq -4$?

- A $x \geq 6$
- B $x \geq 2$
- C $x \leq 2$
- D $x \leq 6$

2005

What is the solution to the inequality shown below?

$$-2x + 3 > 7$$

- A $x < -5$
- B $x < -2$
- C $x > 2$
- D $x < 3$

2004

What is the solution to the inequality

$$7x - 5 \geq x + 1?$$

- F $x \leq 1$
- G $x \geq 1$
- H $x \geq -1$
- J $x \leq \frac{5}{2}$

2003

What is the solution to $2x + 3 \geq x - 5$?

- F $x \geq \frac{-8}{3}$
- G $x \geq -8$
- H $x \geq \frac{-2}{3}$
- J $x \geq -2$

2002

What is the solution to $3(x - 5) \geq 12$?

- F $x \leq 1$
- G $x \geq -1$
- H $x \geq \frac{17}{3}$
- J $x \geq 9$

2001

What is the solution to $2x - 4 < 6$?

- F $x < 1$
- G $x < 5$
- H $x < 10$
- J $x > 1$

2000