

Algebra I (Lesson 2.4)

1. $c > 5$

2. $h < 5$

3. $2x < 10$

$x < 5$

4. $6 + 5x \geq 21$

$5x \geq 15$

$x \geq 3$

5. $2c + 8.00 \leq 15.00$

$2c \leq 7.00$

$c \leq 3.50$

6. $3b + 1 + 2 \leq 18$

$3b + 3 \leq 18$

$3b \leq 15$

$b \leq 5$

7. $3(x - 2) > -3$

$3x - 6 > -3$

$3x > 3$

$x > 1$

9. $3 + \frac{1}{2}(3 - x) < -7$

2. $(3 + \frac{3}{2} - \frac{1}{2}x) < -7$

$6 + 3 - x < -14$

$9 - x < -14$

$-x < -23$

$x > 23$

11. $5(3 - x) - 4(2 - 3x) > 2$

$15 - 5x - 8 + 12x > 2$

$7x + 7 > 2$

$7x > -5$

$x > -\frac{5}{7}$

13. $x + 1 > -5(7 - 2x)$

$x + 1 > -35 + 10x$

$36 > 9x$

$4 > x$ $x < 4$

15. $2x \leq -\frac{2}{3}(4x + 4)$

$(2x \leq -\frac{8}{3}x - \frac{8}{3}) \cdot 3$

$6x \leq -8x - 8$

$14x \leq -8$

$x \leq -\frac{8}{14}$

$x \leq -\frac{4}{7}$

$$17. -5 - 3x \geq 2(10 + 2x) + 3$$

$$-5 - 3x \geq 20 + 4x + 3$$

$$-5 - 3x \geq 4x + 23$$

$$-28 \geq 7x$$

$$-4 \geq x \quad \boxed{x \leq -4}$$

$$19. 8\left(\frac{1}{4}x - 3\right) + 24 < 4(x + 5)$$

$$2x - 24 + 24 < 4x + 20$$

$$2x < 4x + 20$$

$$-2x < 20$$

$$\boxed{x > -10}$$

$$24. t(1.50 + 1.25) + 10.00 \leq 20.00$$

$$2.75t + 10.00 \leq 20.00$$

$$2.75t \leq 10.00$$

$$t \leq 3.6363\dots$$

$t \leq 3$ would be a better inequality since it is a whole number