Brian $C = 15 + 5.50h$

Greg $C = 12 + 6.25h$

Brian $>$ Greg

$15 + 5.50h > 12 + 6.25h$ (−15, +15)

$5.50h > -3 + 6.25h$ (−6.25h, −6.25h)

$-.75h > -3$ (÷ −.75, ÷ −.75)

$h < 4$

$\frac{-3}{-\frac{3}{4}}$

$-\frac{3}{1} \cdot -\frac{4}{3}$

4

$2(x+4) < 9x - 5x + 2$

$2x + 8 < 4x + 2$

$-2x + 8 < 2$

$-2x < -6$

$x > 3$

$2x + 8 < 4x + 2$

$8 < 2x + 2$

$6 < 2x$

$3 < x$ $\quad x > 3$

$4x - 1 > 2(2x + 6)$

$-4x \quad +1 \qquad -4x \quad +1$

$4x - 1 > 4x + 12$

$0 > 13$

$-1 > 12$ No

No Solution

$6x - 4x + 6 < 2(x + 5)$

$-2x \quad -6 \qquad -2x \quad -6$

$2x + 6 < 2x + 10$

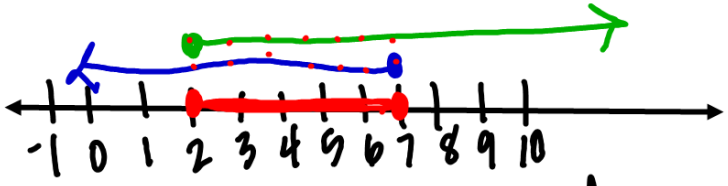
$0 < 4$

$6 < 10$ Yes

Infinitely many solutions

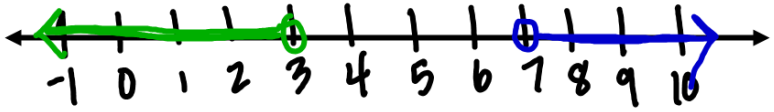
6.3 Compound Inequalities

$2 \leq x \leq 7$ between



Conjunction both And

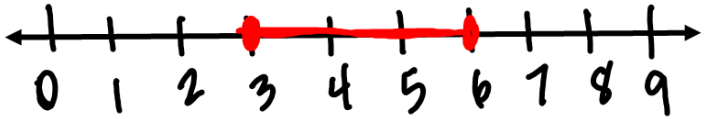
$x < 3$ or $x > 7$



$$5 \leq x + 2 \leq 8$$

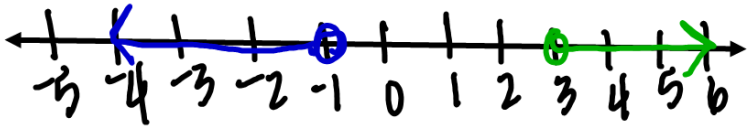
$$-2 \quad -2 \quad -2$$

$$3 \leq x \leq 6$$

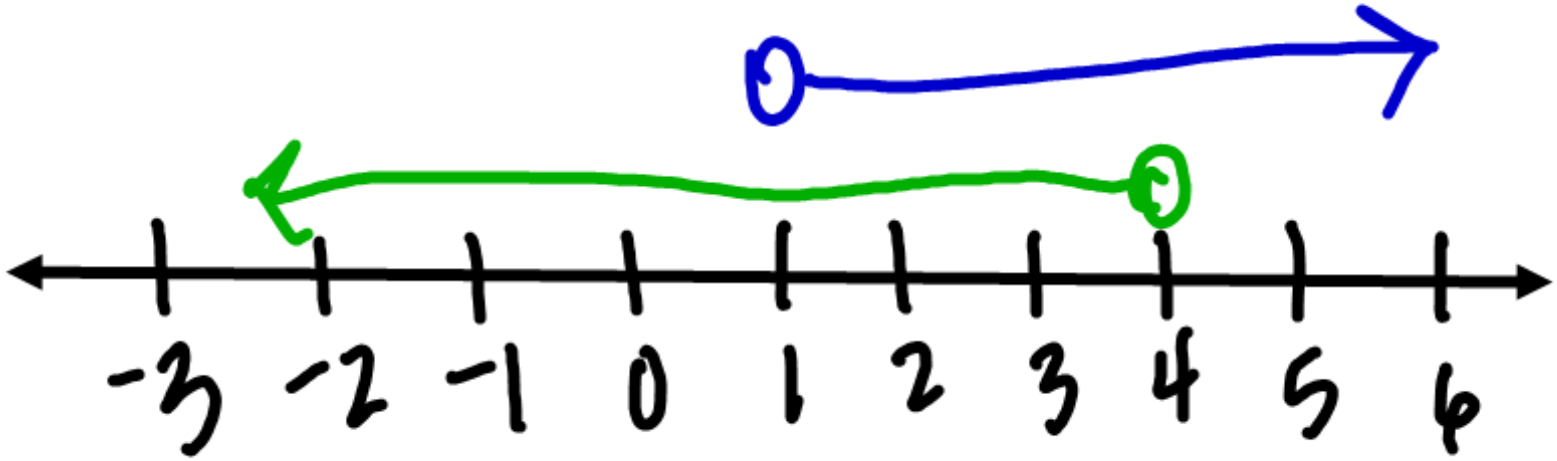


$$\frac{7x}{7} > \frac{21}{7} \quad \text{or} \quad \frac{2x}{2} < \frac{-2}{2}$$

$$x > 3 \quad \text{or} \quad x < -1$$



Disjunction



All Real Numbers

$x < 4$ or $x > 1$

At least one place

p 293

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