

Homework Review - 6.4

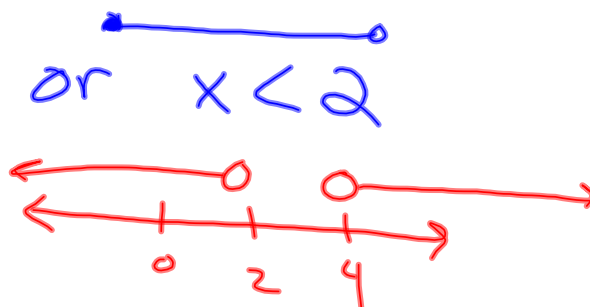
$$x \geq 4$$



$$x \geq -2 \text{ and } x < 3$$



$$x > 4 \text{ or } x < 2$$



$$\frac{6x}{6} > \frac{24}{6} \quad \text{and} \quad \frac{-2x}{-2} < \frac{30}{-2}$$
$$x > 4 \quad \text{and} \quad x > -15$$

$$-2 < x < 12 =$$
$$x > -2 \quad \text{and} \quad x < 12$$

$$\frac{40}{-2} < \frac{-2x}{-2} \leq \frac{22}{-2}$$
$$-20 > x \geq -11$$

(27) $a > 3x + 8$ or $a > -4x - 1$

$\begin{array}{cc} -8 & -8 \\ \frac{a-8}{3} > \frac{3x}{3} \end{array}$ $\begin{array}{cc} +1 & +1 \\ \frac{a+1}{-4} > \frac{-4x}{-4} \end{array}$

$\frac{a-8}{3} > x$ $-\left(\frac{a+1}{4}\right) < x$

$x < \frac{a-8}{3}$ $x > -\left(\frac{a+1}{4}\right)$

$x < 5$ and $x > -6$

$3 \cdot \frac{a-8}{3} = 5 \cdot 3$ $-\left(\frac{23+1}{4}\right)$

$\begin{array}{cc} a-8 = 15 \\ +8 & +8 \\ a = 23 \end{array}$ $-\left(\frac{24}{4}\right)$

$\begin{array}{cc} & -6 \\ & \text{C} \end{array}$

(44)

20 mph = wind speed

 w = wind chill temp

$$w = -22 + 1.3a$$

 a = air temperature

$$w \geq -9 \text{ \& } w \leq -2.5$$

$$-9 \leq w \leq -2.5$$

$$\begin{array}{rcc} -9 & \leq & -22 + 1.3a \leq -2.5 \\ +22 & & +22 \end{array}$$

$$\frac{13}{1.3} \leq \frac{1.3a}{1.3} \leq \frac{19.5}{1.3}$$

$$10 \leq a \leq 15$$

$$\begin{aligned} \textcircled{20} \quad & -2h - 7 > h + 5 \quad \text{or} \quad 4 \cdot \frac{1}{4}(h+8) \geq 9 \cdot 4 \\ & \quad +2h \quad \quad +2h \\ & -7 > 3h + 5 \\ & -5 \quad \quad -5 \\ & \frac{-12}{3} > \frac{3h}{3} \\ & -4 > h \\ & h < -4 \end{aligned}$$
$$\begin{aligned} & h + 8 \geq 36 \\ & \quad -8 \quad -8 \\ & h \geq 28 \end{aligned}$$

$$\begin{array}{lcl} \textcircled{18} & -14 > w + 3 & \text{or} & 5w - 13 > w + 7 \\ & -3 & & -w \\ & -17 > w & & 4w - 13 > 7 \\ & & & +13 & +13 \\ & w < -17 & 3 < 5 & \frac{4w}{4} > \frac{20}{4} \\ & & 5 > 3 & w > 5 \end{array}$$



Quiz - open notes! (YOUR NOTES ONLY)

When done, start on homework - Worksheet