p.339-340: 20, 24, 26-31(W), 33-41(0), 49, 50

$9+9+x+x > 26$

(20) $x > -18$

(24) $-3 > x$

(26) $x \leq -5$

(27) $x \geq -3$

(28) $-9 < x$

(29) C

(30) B

(31) A

(33) $x < 12$

(35) $6 \leq x$

(37) $x \leq -1$

(39) $x > \frac{1}{2}$

(41) $x > -\frac{14}{3}$

(49) $2x + 18 > 26 ; x > 4m$

(50) $4x \leq 25 ; x \leq 6\frac{1}{4}m$

Inequalities Involving "And"
Intersection

what is in common $\{2,4,6,8\}$ "and" $= \{1,2,3,4,5\}$
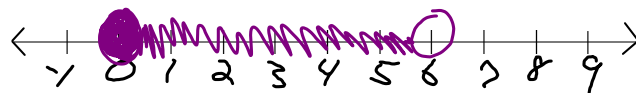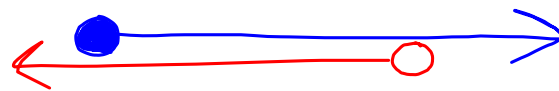$= \{2,4\}$

Write a Compound Inequality that represents $\mathbb{R}$ greater than or equal to Zero "and" less than 6.

$x \geq 0$ and $x < 6$

Get the Variables touching "and"

$0 \leq x$ and $x < 6$

$0 \leq x < 6$

$\leftarrow | \overset{-1}{\,} \overset{0}{\,} \overset{1}{\,} \overset{2}{\,} \overset{3}{\,} \overset{4}{\,} \overset{5}{\,} \overset{6}{\,} \overset{7}{\,} \overset{8}{\,} \overset{9}{\,} \rightarrow$

the Purple is the Answer
the red and blue are the work to get the Answer

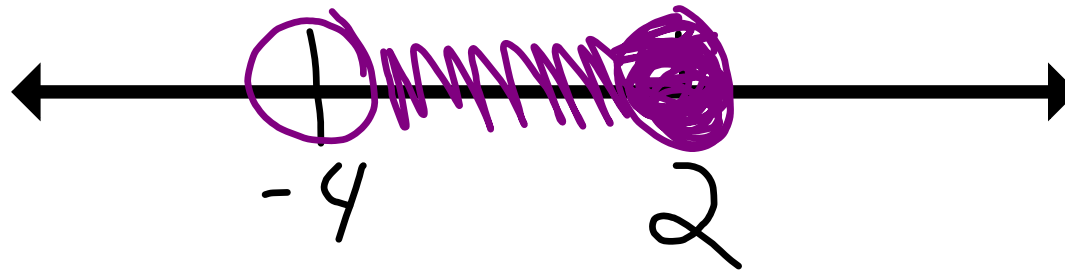ex2) Graph $-2 < y < 0$
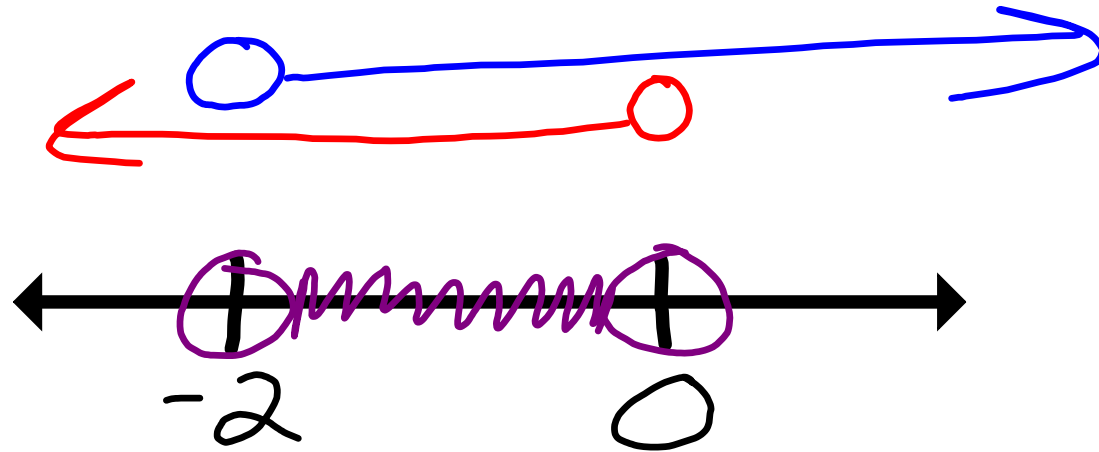
What does this Mean?

R greator than -2 and less than 0.

Solving: * Get `x` by Itself

$$-2 < x + 2 \leq 4$$
$$\underline{-2 \qquad\qquad -2 \qquad -2}$$
$$-4 < x \leq 2$$

$-2 < x+2$ and $x+2 \leq 4$
$$\underline{-2 \quad -2} \qquad \underline{-2 \quad -2}$$
$-4 < x$ and $x \leq 2$
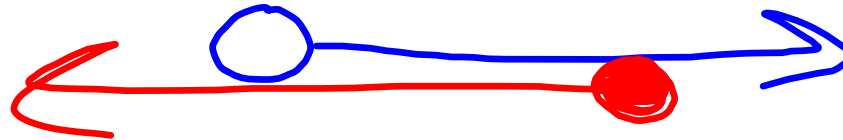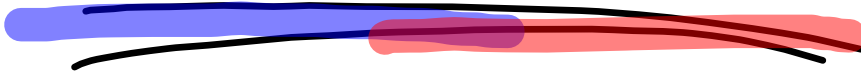
-4   2

ex4) $-3 \leq 2x+1 \geq 5$

$-1 \qquad -1 \qquad -1$

$$-4 \leq \frac{2x}{2} \geq 4$$
$$\frac{-4}{2} \leq \frac{2x}{2} \geq \frac{4}{2}$$

$-2 \leq x \geq 2$

-2   2

ex5) $-2 < -2 - x < 1$

$$\underline{+2 \qquad +2 \qquad +2}$$

$$0 < -x < 3$$
$$\overline{-1} \qquad \overline{-1}$$

$$0 > x > -3$$
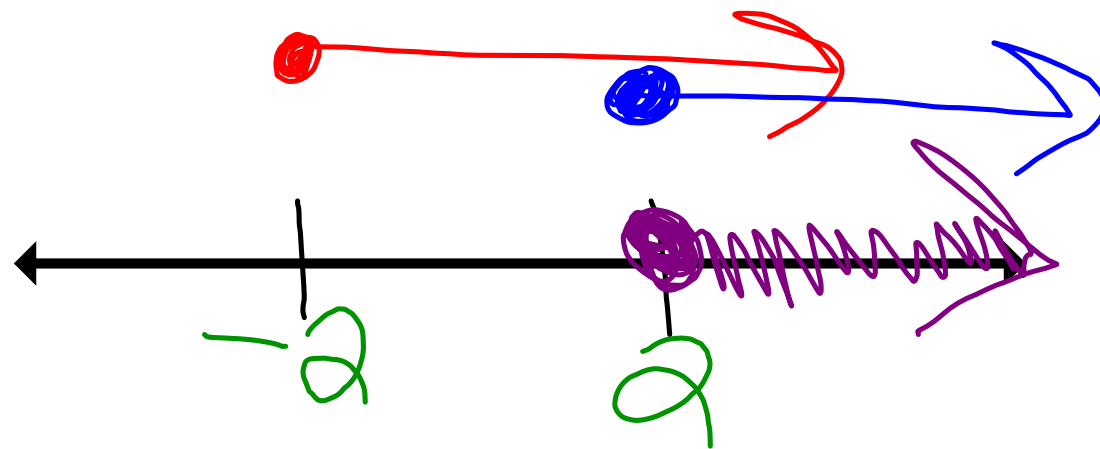
O.T.L.

① Pg 345-346:
14-17 (a);
29-37 (o);
40-46 (e);
28