1.4 2ND ASSIGNMENT

P32: 1, 37-45 ODD, 46, 48, 49, 51

EXTEND: 50, 51, 68-71

ADVANCED: 52-56, 59, 61

* CHECK ODD # PROBLEMS IN BACK OF BOOK

#46. $|3x+8| - 9 = -5$ **NO**

$|3x+8| = 4$

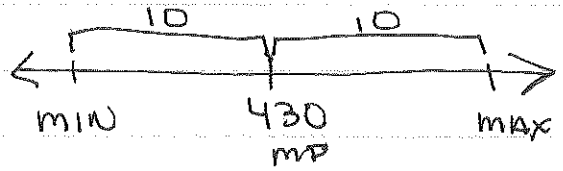
ISOLATE THE ABSOLUTE VALUE FIRST!

THIS MAKES THE CONSTANT ON THE RIGHT POSITIVE.

#48. a) $430 = mp$

$20 =$ TOTAL DIST

$10 = \frac{1}{2}$ TOTAL DIST



$\Rightarrow |x - 430| = 10$

$x - 430 = 10$ OR $x - 430 = -10$

$x = 440$ $x = 420$

max = 440 **min = 420**

b) $423 - 16 = 407$ NO. THE BALL IS TOO LIGHT TO BE AN ACCEPTABLE WEIGHT

1.4 2ND

#50. BOTH SOLUTIONS MAKE THE CONSTANT ON THE RIGHT NEGATIVE. SO, THERE IS NO SOLUTION.

#52. $|x - b| = d$

#54. ALWAYS; $a - b$ AND $b - a$ ARE OPPOSITES, SO THEY WILL HAVE THE SAME ABSOLUTE VALUES.

#56. ALWAYS; THE SOLUTIONS ARE:

$x - p = 4$ OR $x - p = -4$

$x = p + 4$ $\quad$ $x = p - 4$

#68. $x^2 = 81$

TAKE THE $\sqrt{\ }$ OF BOTH SIDES

$\sqrt{x^2} = \sqrt{81}$

$x = 9$ OR -9

CAN'T HAVE A NEG LENGTH.

$\Rightarrow \boxed{x = 9_m}$

#70. $\frac{1}{2}bh = 48$

$\frac{1}{2}b(8) = 48$

$8b = 96$

$\boxed{b = 12_{ft}}$