

Algebra I Weds: 10-3-12 CLASS NOTES

(22) $|-2x + 3| = 5.8$

Homework
Review

$$\begin{array}{r} + \\ \downarrow \\ -2x + 3 = 5.8 \\ -3 \quad -3.0 \\ \hline -2x = 2.8 \\ \hline -2 \quad -2 \end{array}$$

$$\boxed{x = -1.4}$$

$$\ominus \quad -(-2x + 3) = 5.8$$

$$\begin{array}{r} 2x - 3 = 5.8 \\ +3 \quad 3.0 \\ \hline 2x = 8.8 \\ \hline 2 \quad 2 \end{array}$$

$$\frac{2x}{2} = \frac{8.8}{2}$$

$$\boxed{x = 4.4}$$

$$\underline{\underline{ck}} \quad |-2(-1.4) + 3| \stackrel{?}{=} 5.8$$

$$|+2.8 + 3| \stackrel{?}{=} 5.8$$

✓

$$\underline{\underline{ck}} \quad |-2(4.4) + 3| \stackrel{?}{=} 5.8$$

$$|-8.8 + 3| \stackrel{?}{=} 5.8$$

$$|-5.8| \stackrel{?}{=} 5.8$$

✓

$$\textcircled{24} \quad \begin{array}{ccc} 8 & = & 7 - |x| \\ -7 & & -7 \end{array}$$

$$1 = -|x|$$

$$\textcircled{-1 = |x|}$$

? Can $|x|$
ever be
negative

$$\boxed{x = -1}$$

FALSE

$$-(x) = -1$$

$$\boxed{x = 1}$$

FALSE

$\boxed{\text{NO SOLUTION}}$ ✓

Practice Worksheet

Problems



26
WS

$$3 \left| \frac{V}{6} \right| = \frac{2}{3}$$

- Get |term| by itself
- Split into $\oplus, \ominus$ equations
- Solve both eq. / do cks.

$$\left| \frac{V}{6} \right| = \frac{2}{3}$$

$$\begin{array}{l} \oplus \\ \ominus \end{array} \left\{ \begin{array}{l} \frac{V}{6} = \frac{2}{3} \cdot 6 \\ -\left(\frac{V}{6}\right) = \frac{2}{3} \end{array} \right.$$

$$\boxed{V = 4}$$

$$-6 - \frac{V}{6} = \frac{2}{3} \cdot 6$$

$$\boxed{V = -4}$$

$$(29) \quad \frac{|-7+x|}{2} = 4 \div 2$$

$$|-7+x| = 8$$

⊕

POS EG

$$+ (-7+x) = 8$$

+7 +7

$$\boxed{x = 15}$$

CKS?

⊖

NEG EG

$$-(-7+x) = 8$$

$$7 - x = 8$$

-7 -7

$$-x = 1$$

$$\boxed{x = -1}$$