HW: 2.5/22-30, 37-41 (just solve, don't graph)

Warm up:

Solve.

$$1-\frac{3}{4}(v+2)=-5$$

$1 - \frac{3}{4}v - \frac{6}{4} = -5$

$-1 \quad -1$

$-\frac{4}{3}\left(-\frac{3}{4}(v+2)\right) = (-6)\left(-\frac{4}{3}\right)$

$-\frac{6}{1}\left(-\frac{4}{3}\right)$

$v+2=8$

$-2 \quad -2$

$v=6$

1) |5| 5

2) |-8| 8

3) |0| 0

4) |-3| 3

$$|x| = 4$$

$x = 4, -4$

$x = \pm 4$

$$|x| = 0$$

$x = 0$

$$|x| = -7$$

no solution

$$3|x| - 2 = 13$$

$+2 \qquad +2$

$$\frac{3|x|}{3} = \frac{15}{3}$$

$$|x| = 5$$

$$x = \pm 5$$

$x = -5, 5$

$$9 - |x| = 16$$

$-9 \qquad -9$

$$-|x| = 7$$

$\frac{}{-1} \qquad \frac{}{-1}$

$$|x| = -7$$

no solution

$$|x| + 5 = 3$$

$$-5 \qquad -5$$

$$|x| = -2$$

no solution

$$|x+5| = 4$$

$x+5=4$ $\quad -5 \quad -5$

$x=-1$

or

$x+5=-4$ $\quad -5 \quad -5$

$x=-9$

$x=-1,-9$

$$|3z - 3| = 9$$

$|9| = 9$

$|-9| = 9$

$3z - 3 = 9$

$+3 \quad +3$

$\frac{3z}{3} = \frac{12}{3}$

$z = 4$

or

$3z - 3 = -9$

$+3 \quad +3$

$\frac{3z}{3} = \frac{-6}{3}$

$z = -2$

$$|4n - 1| = -6$$

no solution

$$6 - |2 - 3m| = -2$$

$-6 \qquad -6$

$$-|2-3m| = -8$$

$-1 \qquad -1$

$$|2-3m| = 8$$

$$2-3m = 8 \quad \text{or} \quad 2-3m = -8$$

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

$$-3m = 6 \qquad -3m = -10$$

$\frac{-3m}{-3} = \frac{6}{-3} \qquad \frac{-3m}{-3} = \frac{-10}{-3}$

$$m = -2 \quad \text{or} \quad m = \frac{10}{3}$$

HW Solutions

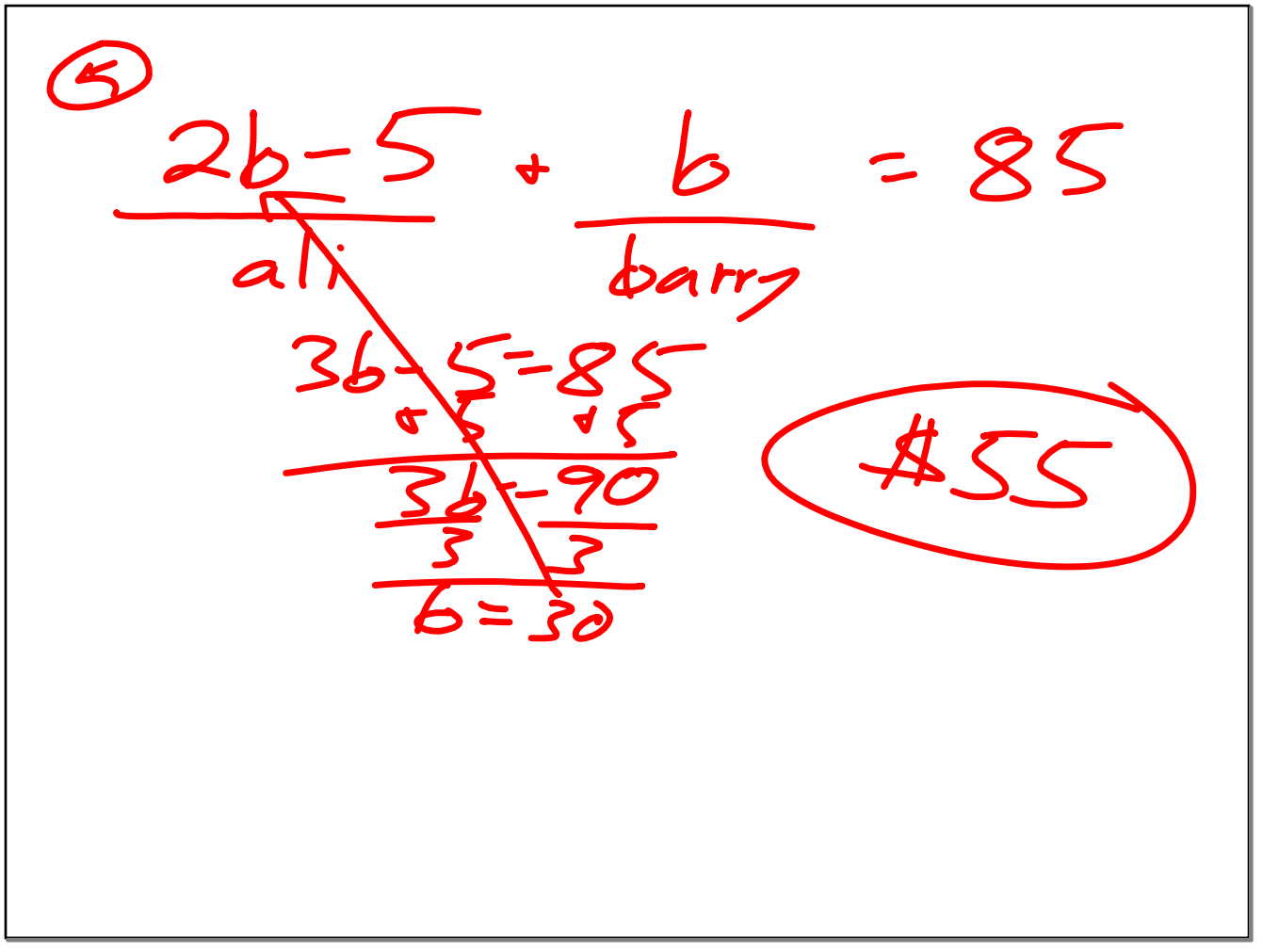
1) 32, 34, 36

2) 70m

3)16cm x 23cm

4) 15cm, 25cm, 30cm

5) Ali has $55


5
2b-5 + b = 85
ali
barry
3b-5=85
+5 +5
3b=90
3 3
b=30
#55

1

$$x + x + 2 + x + 4 = 102$$

$$3x + 6 = 102$$

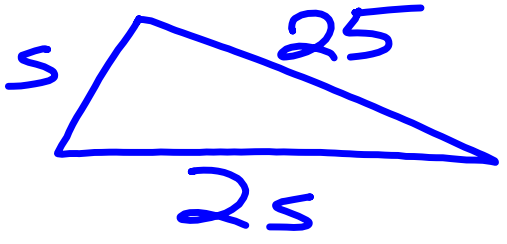
$$-6 \quad -6$$

$$\frac{3x}{3} = \frac{96}{3}$$

$$x = 32$$

32, 34, 36

④



$s + 2s + 25 = 70$

$3s + 25 = 70$

$-25 \quad -25$

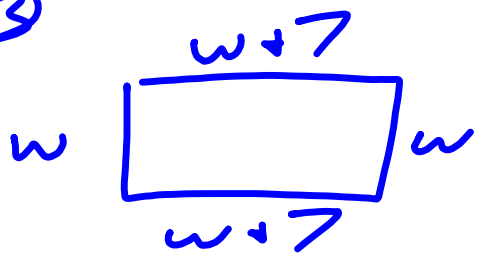
$3s = 45$

$\frac{3s}{3} = \frac{45}{3}$

$s = 15$

15cm, 25cm, 30cm

③



$w + w + 7 + w + w + 7 = 78$

$4w + 14 = 78$

$-14 \quad -14$

$\frac{4w}{4} = \frac{64}{4}$

$w = 16$

16 cm × 23 cm

1) $|n| = 5$

2) $|a + 7| = 9$

3) $|2t - 4| = 8$

4) $|5h + 2| = -8$

5) $|n| - 2 = 16$

6) $-7|x| + 5 = 2$

7) $4 + |3x - 1| = 19$

1) $|n| = 5$

$n = \pm 5$

2) $|a + 7| = 9$

$a + 7 = 9$ $\quad$ $a + 7 = -9$

$-7 \quad -7$ $\quad$ $-7 \quad -7$

$a = 2$ $\quad$ or $\quad$ $a = -16$

3) $|2t - 4| = 8$

$2t - 4 = 8$ $\quad +4 \quad +4$

$\frac{2t}{2} = \frac{12}{2}$

$t = 6$

or

$2t - 4 = -8$ $\quad +4 \quad +4$

$\frac{2t}{2} = \frac{-4}{2}$

$t = -2$

4) $|5h + 2| = -8$

no solution

5) $|n| - 2 = 16$

6) $-7|x| + 5 = 2$

7) $4 + |3x - 1| = 19$

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