Algebra Bellwork - October 24, 2011

The sum of two consecutive numbers is 173. Find the two numbers.

1st 2nd

$x + x + 1 = 173$

$86 + 87 = 173$

$2x + 1 = 173$

$2x = 172$

$x = 86$

The sum of two consecutive EVEN numbers is 74. Find the two numbers.

$$x + x + 2 = 74$$

$$2x + 2 = 74$$

$$-2 \quad -2$$

$$\frac{2x}{2} = \frac{72}{2}$$

$$x = 36$$

36, 38

The sum of two consecutive numbers is 97. Find the two numbers.

$x + (x+1) = 97$

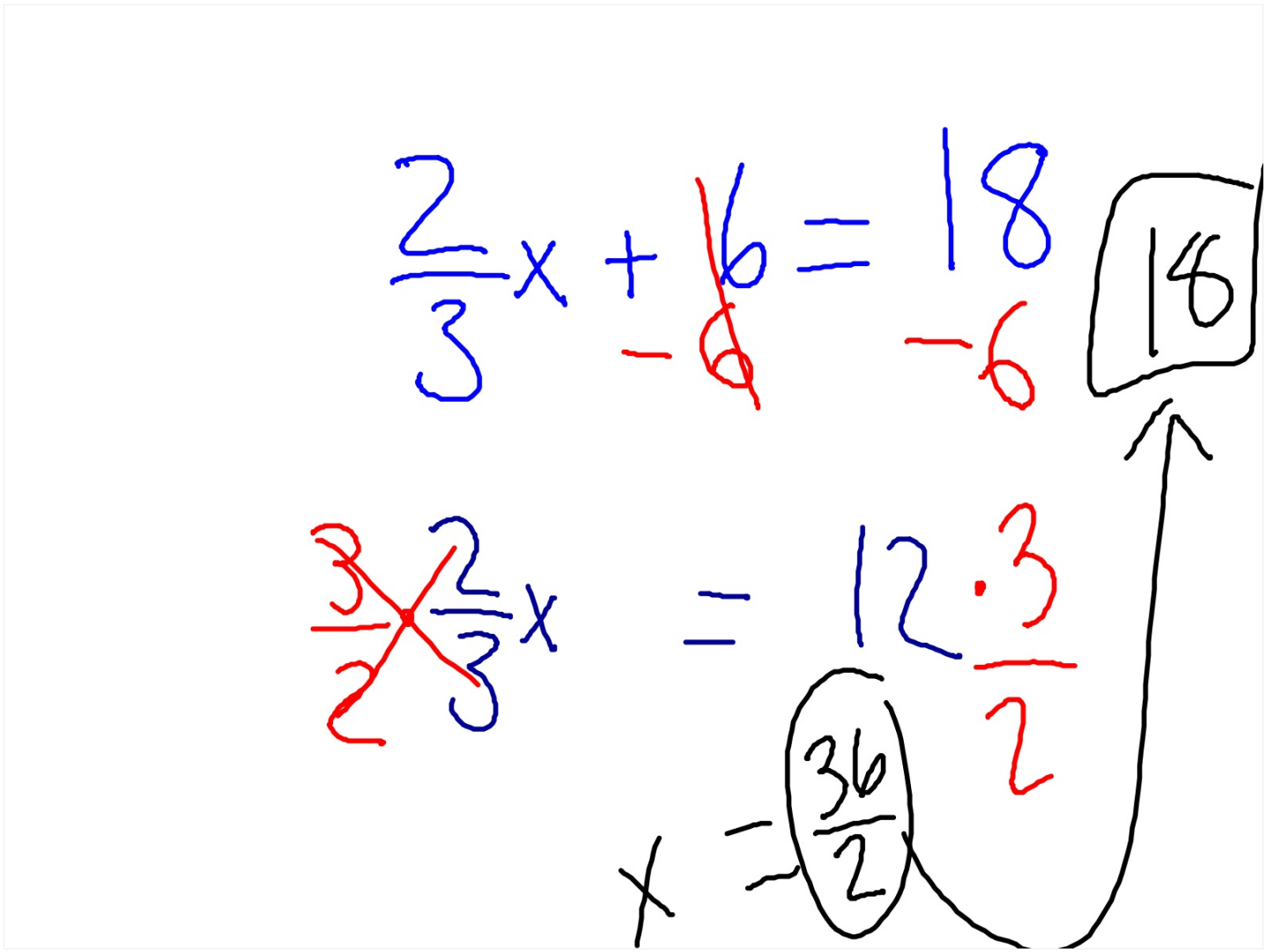
$2x + 1 = 97$

$-1 \quad -1$

$2x = 96$

$x = 48$

48, 49


2/3x + 6 = 18
-6 -6
16
3/2 2/3x = 12·3/2
x = 36/2

$$\frac{3}{4}x - 2 = 15$$

$$+2 \qquad +2$$

$$\frac{\cancel{4}^{1}}{\cancel{3}_{1}} \cdot \frac{3}{\cancel{4}_{1}}x = 17\frac{4}{3}$$

$$x = \frac{64}{3}$$

$$2(3x-4)=26$$

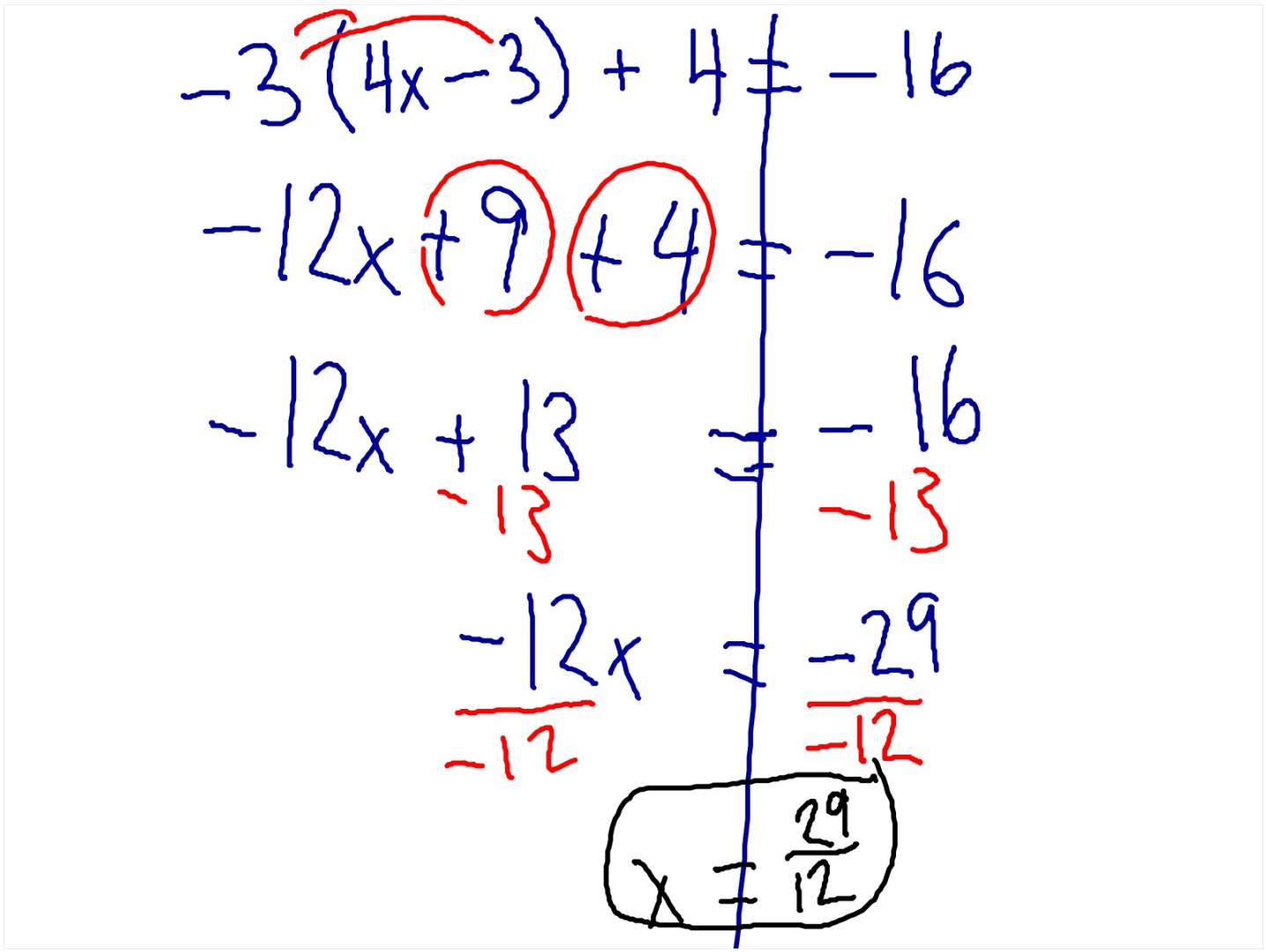
$$6x-8=26$$

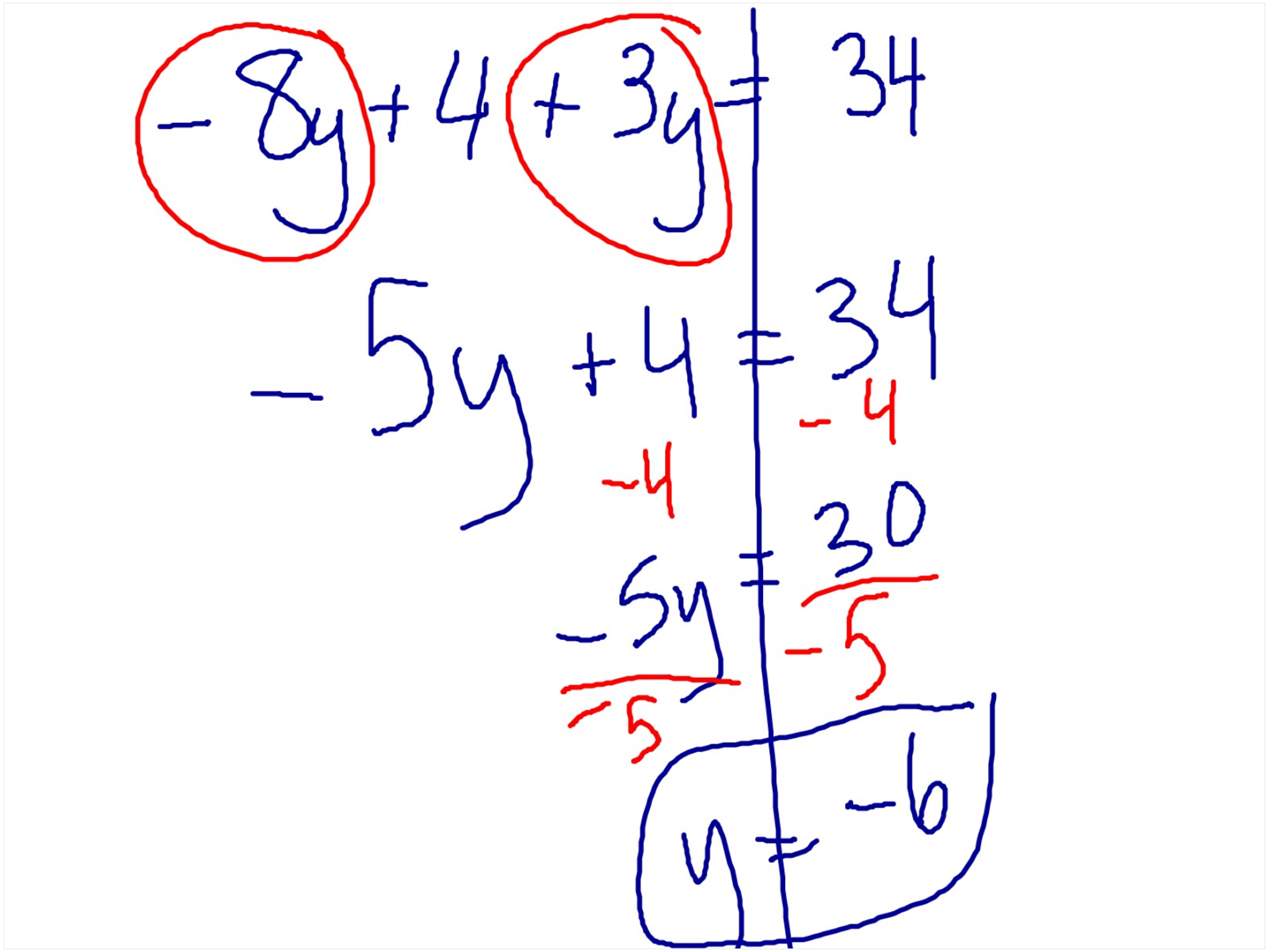
$$+8 \qquad +8$$

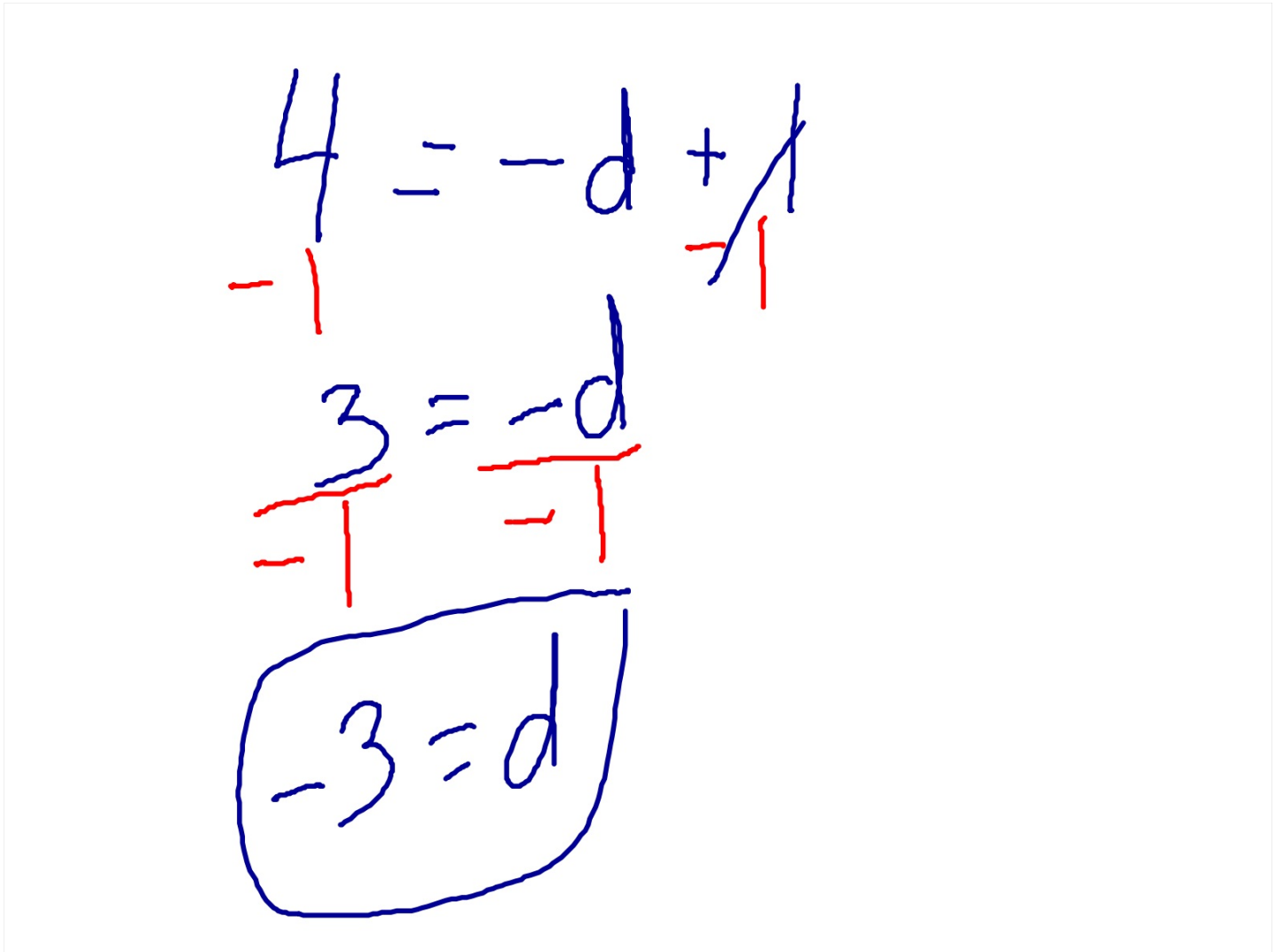
$$\frac{6x}{6}=\frac{34}{6}$$

$$\frac{6}{6}$$

$$x=\frac{17}{3}$$


$-3(4x-3)+4=-16$
$-12x+9+4=-16$
$-12x+13=-16$
$-13 \quad -13$
$-12x=-29$
$-12 \quad -12$
$x=\frac{29}{12}$


-8y + 4 + 3y = 34
-5y + 4 = 34
-4 -4
-5y = 30
-5 -5
y = -6


4 = -d + 1
-1 -1
3 = -d
-1 -1
-3 = d