Solving One-step Equations

Sections 3.1 - 3.2

Solving for the variable

- **GOAL:** To get the variable by itself

- **Steps:**
  - "Undo" by performing the opposite operation
  - Follow the REVERSE of the order of operations

Examples: Adding/Subtracting

1. $x + 5 = 6$

$-5 \quad -5$

$x = 1$

2. $x + 3 = -12$

$-3 \quad -3$

$x = -15$

3. $6 = a + 4$

$-4 \quad -4$

$2 = a$

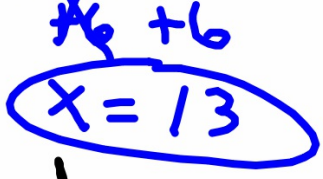
4. $6 + b = 4$

$-6 \quad -6$

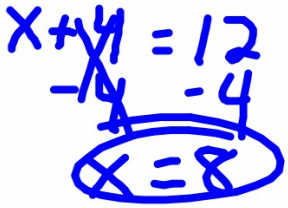
$b = -2$

Examples: Adding/Subtracting

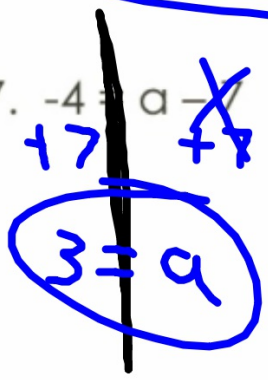
5. $x - 6 = 7$



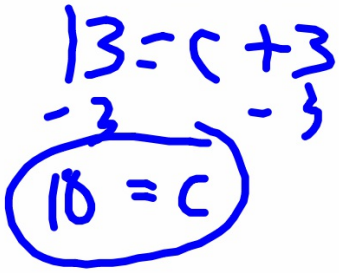
6. $x - (-4) = 12$



7. $-4 = a - 7$

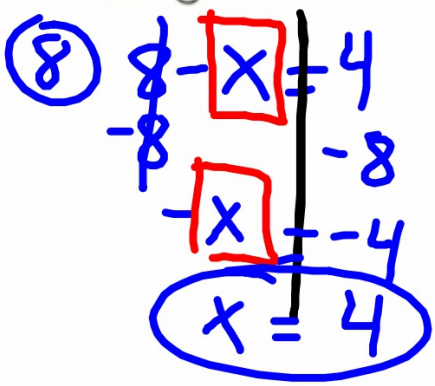


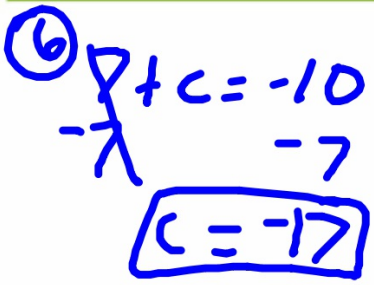
8. $13 = c - (-3)$

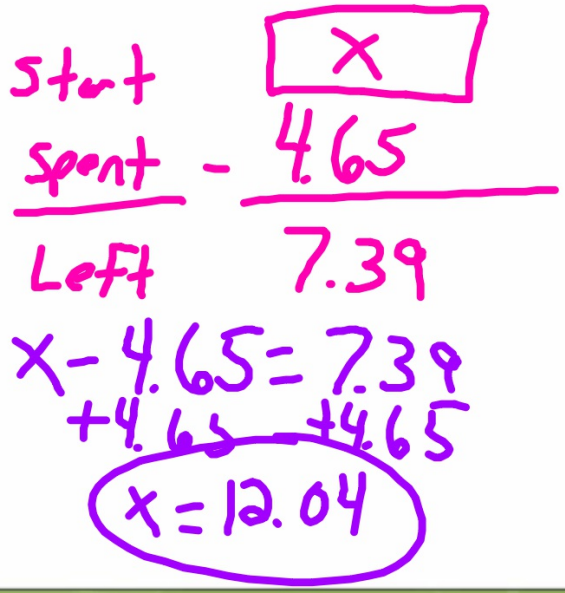


Classwork

- Pg 135 # 4-12

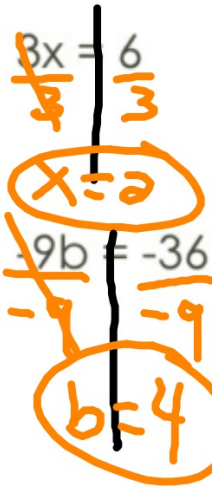




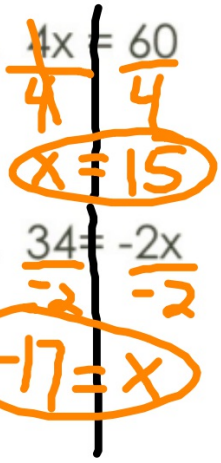


Examples: Multiplying/Dividing

1. $3x = 6$



2. $4x = 60$



3. $-9b = -36$

4. $34 = -2x$

Examples: Multiplying/Dividing

5. $\frac{x}{5} = 7 \cdot 5$

$x = 35$

6. $\frac{x}{-3} = -8 \cdot -3$

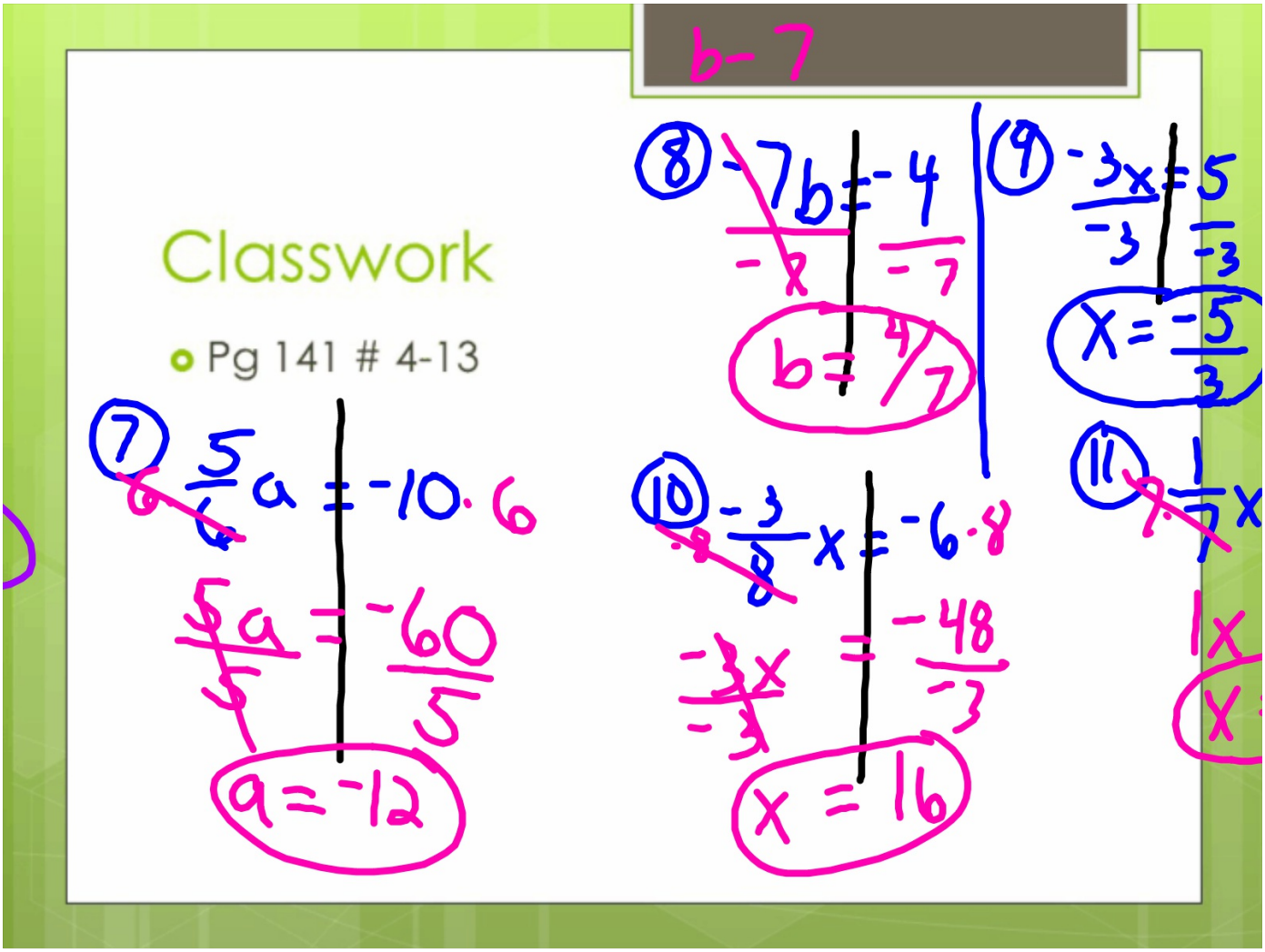
$x = 24$

7. $\frac{x}{4} = -7 \cdot 4$

$x = -28$

8. $9 = \frac{x}{9} \cdot 9$

$81 = x$


b-7
Classwork
Pg 141 # 4-13
7) 5/6 a = -10.6
6/5 5/6 a = -60 · 6/5
a = -12
8) -7b = -4
-7 -7
b = 4/7
9) -3x = 5
-3 -3
x = -5/3
10) -3/8 x = -6.8
-8/3 -3/8 x = -48 · -8/3
x = 16
11) 1/7 x
7/1 1/7 x
1x
x

Classwork - together

- Pg 135 # 13-20 – out loud
- Pg 135 # 42-44
- Pg 142 # 14-19- out loud
- Pg 142 # 48-54

Homework

- Pg 135 # 21-35
- Pg 142 # 24-38