

Name _____

Date _____

Topic 1: Solving Equations

Solving Two Step Equations

Video Help 1: <http://www.khanacademy.org/math/cc-seventh-grade-math/cc-7th-variables-expressions/cc-7th-2-step-equations/v/equations-2>

Video Help 2: <http://www.khanacademy.org/math/cc-seventh-grade-math/cc-7th-variables-expressions/cc-7th-2-step-equations/v/solving-equations-1>

1) $3x - 8 = 19$

2) $2x + 7 = 35$

3) $4 - 2x = 10$

4) $3.2 = 0.8c - 4$

5) $\frac{3}{5}x - 7 = 11$

6) $\frac{1}{4}x + 6 = 14$

Solving Equations by Combining like Terms

Video Help 1: <http://www.khanacademy.org/math/cc-seventh-grade-math/cc-7th-variables-expressions/cc-7th-2-step-equations/v/two-step-equations>

Video Help 2: <https://learnzillion.com/lessons/1009-solve-linear-equations-by-combining-like-terms>

7) $27x - 3x + 18 = 6$

8) $4w + 20w - 15 = 57$

Solving Equation with the Variable on Both Sides

Video Help: <https://learnzillion.com/lessons/150-solve-equations-with-variables-on-both-sides>

9) $2m + 36 = -3m - 4$

10) $10r - 15 = 9r - 9$

Solving Equations by Distributing

Video Help: <https://learnzillion.com/lessons/149-solve-multistep-equations-using-the-distributive-property>

$$11) 8y - 2(y - 3) = 12$$

$$12) (x + 2) - (3x - 2) = x + 3$$

$$13) 4w + 5(4w - 3) = 57$$

$$14) 6 + 2(3 - 2d) = 6d + 2$$

Word Problems

Video Help: <http://www.khanacademy.org/math/cc-seventh-grade-math/cc-7th-variables-expressions/cc-7th-linear-eq-word-probs/v/basic-linear-equation-word-problem>

- 15) David bought a magazine for \$5 and four erasers. He spent a total of \$25. How much did each eraser cost?

- 16) 331 students went on a field trip. Six buses were filled and 7 students traveled in cars. How many students were in each bus?

- 17) Aliyah had \$24 to spend on seven pencils. After buying them she had \$10. How much did each pencil cost?

- 18) Samantha won 40 tokens at her school's game night. Later, she gave two tokens to each student in her class. She had 8 remaining. How many students did she give tokens to?

- 19) For a field trip 4 students rode in cars and the rest filled nine buses. How many students were in each bus if 472 students were on the trip?

- 20) Mandy spent half of her weekly allowance playing mini-golf. To earn more money her parents let her wash the car for \$4. What is her weekly allowance if she ended with \$12?