

# Test Two Step Equations

Name: \_\_\_\_\_

**Solve each problem on your loose-leaf paper- do NOT write on this paper!**

1)  $\frac{5}{6} + 3j = \frac{2}{3}$

2)  $-\frac{9}{10}p - 3 = \frac{3}{5}$

3)  $4y - 16.3 = 53.1$

**DIRECTIONS:** Identify the correct equation for each scenario below. Then solve, on you loose-leaf paper.

4. A cell phone company charges a fixed texting rate of \$25 per month, plus \$0.05 for every text sent over the plan. If your text charges came to \$30, how many texts did you send past your plan?

- A.  $30 + 0.05x = 25$
- B.  $25x + 0.05 = 30$
- C.  $0.05x + 25 = 30$
- D.  $5x + 25 = 30$

5. You spend half of your allowance at the movies, and you mow lawns over the weekend to earn an extra \$12. If you currently have \$25, how much allowance did you receive?

- A.  $2x + 12 = 25$
- B.  $\frac{1}{2}x + 12 = 25$
- C.  $25x + 12 = \frac{1}{2}$
- D.  $12x + \frac{1}{2} = 25$

6. Austin has \$145 in his savings account. He earns \$36 a week mowing lawns. If Austin saves all of his earnings, after how many weeks will he have \$433 saved?

- A.  $145x + 36 = 433$
- B.  $36x + 145 = 433$
- C.  $433x + 145 = 36$
- D.  $36x + 433 = 145$

**Solve each problem below, on your loose-leaf paper** (buckets!)

7. On Friday, it was 32 degrees at 6am and rose 3 degrees per hour for several hours. How many hours did it take the temperature to reach 53 degrees?

8. T-shirts cost \$7 each plus a \$25 fee for the silk screen. How many shirts can the softball team buy if they have \$235 from their fundraiser?

9. A painter charges \$12 per hour plus \$50 for every job. If he made \$194 on a job, how many hours did he work?

10. You bought a magazine for \$5 and 20 erasers. If you spent a total of \$11, how much did each eraser cost?

**Review: Not extra credit...No calculator!**

11. The width of a rectangle is  $2x + 3$ . The length is 5 times as long. What is the perimeter, in terms of  $x$ ? (draw a picture)

12. I bought an ipad for \$600. I paid 7% tax. What was the total cost of the ipad?

13. A rectangle has a length that is 3 more than the width. The perimeter is 26, what is the area? (Draw a picture)

14. What is the constant of proportionality of an ordered pair that is (5, 2)? What is the equation?

15. I can walk  $\frac{3}{4}$  of a mile in  $\frac{3}{5}$  of an hour. How long does it take to walk a mile? How far can I go in an hour? \_ make a t-chart- write your answers in complete sentences.