

NAME _____ TEST GRADE: _____ DEADLINE: Wednesday, Sept. 20th

RETEST REVIEW: SOLVING EQUATIONS

Solve each of the following. SHOW ALL WORK!

1. $15 = -3(m - 1) + 9$

2. $4a - (5 - a) = -20$

3. $4(3r - 1) + 7 = 12r + 6$

4. $3x - 5 = 7x - 21$

5. $8 - 2x + 1 = 8x + 9 - 10x$

6. $2(x - 3) = 3x - 8$

Write an equation for each of the following problems and solve. (10 points each)

7. Rachel and Amanda are planting tulip bulbs. Rachel has planted 45 bulbs and is planting at a rate of 33 bulbs per hour. Amanda is planting at a rate of 36 bulbs per hour and has planted 36 bulbs. How long will it take Rachel and Amanda to plant the same number of bulbs? How many bulbs will that be?

Equation: _____

8. A moving company charges \$450 plus \$12 per hour. Another moving company charges \$21 per hour. How long is the job that costs the same no matter which moving company is used?

Equation: _____

9. The length of a rectangle is 6 in less than 3 times the width. If the perimeter is 36 in, what is the width of the rectangle?

Equation: _____



10. A triangle with side lengths x cm, $5x + 8$ cm, and $4x - 7$ cm has a perimeter of 71 cm. How long is the longest side of the triangle?

Equation: _____



Answers in random order: No solution, All real numbers, 6, 43, -1, -3, 4, 3, 2, 50, 144