

# ALGEBRA

Name \_\_\_\_\_

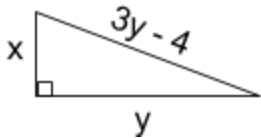
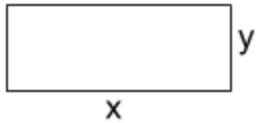
## Word Problem Final - REVIEW

1. The total cost of 10 gallons of regular gasoline and 15 gallons of premium gasoline is \$101.75. Premium costs \$0.20 more per gallon than regular. What is the cost per gallon of each type of gasoline?
2. Mrs. Davies has three times as many dimes as nickels. She has four more quarters than nickels. If the value of the coins is \$9.40, how many nickels does Mrs. Davies have? Define all variables and solve.
3. Cameron walks on the sidewalk 50 yards North, then walks 150 yards East. If she had cut across the field instead, how much shorter would her walk have been?
4. To solve the following problem, draw a diagram, then write and solve an equation. A rectangular garden is three times as long as it is wide. There is a two foot path around the garden. If the area of the path is 112 square feet, what are the dimensions of the garden?

5. The length of a photograph is 1 cm less than twice the width. The area is  $91 \text{ cm}^2$ . Find the dimensions of the photograph.

6. A company that manufactures the sensational new Fidget Spinners that are all the rage among today's youths! One of the parts in the spinner calls for the length to be 8 mm. Any part manufactured with an error greater than 0.11 mm is rejected. Parts with what lengths are rejected?

7. The perimeter of the rectangle below is 68 cm. The perimeter of the triangle is 60 cm. Find the length of the hypotenuse of the triangle.



8. In seven years, Seta's son Stu is leaving home for college. Seta hopes to save \$8000 to pay for his first year. She has \$5000 now and has found a bank that pays 7.75% interest, compounded daily. At this rate, will she have the money she needs for Stu's first year of college? If not, how much more does she need?