Name: _____   Date: _____
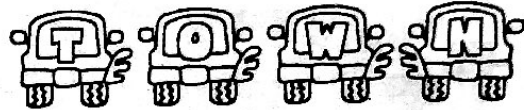
Math – Block _____   MATH TOWN

Concepts to be reviewed:

Area of rectangles, triangles & trapezoids.

Using the Pythagorean Theorem to find the missing side length in a right triangle.

Directions: Graph the following points and label them (as the named location) on the graph paper provided. Answer the questions.

Points:

Grandpa Baldwin's farm	(-6, 9)	MT High School	(6, -1)
MT General Store	(2, 2)	Sam's Grocery	(-2, -9)
Fire Department	(-7, -3)	Post Office	(-3, -9)
MT Savings Bank	(-2, -4)	MT Middle School	(1, -6)
MT Library	(6, 2)	Your House	(2, 6)
MT Town Hall	(-3, 1)	MT Supersuds Car Wash	(-6, 1)
Bill's Towing	(-7, -5)	MT Police Station	(-3, -3)
Town Square (Also called center of town)	(0, 0)	Uncle Ben's	(2, 9)
MT Elementary School	(6, -6)	The Old Oak Tree	(7, 2)

Draw the following streets:

Center Street is the *y-axis* {*remember, this runs up and down through (0, 0)*}

Main Street is the *x-axis* {*remember, this runs from left to right through (0, 0)*}

School Street runs from point (7, 0) to point (-4, -11)

A Street goes from MT Middle School to MT Elementary School and continues out of town.

B Street goes from MT Elementary School to MT High School.

Penny Lane goes from (-2, 0) to Sam's Grocery.

Stamp Street goes from the bank to the post office and continues on. It stops at School Street.

Junk Yard Road goes from (-7, 0) straight down past the fire department, Bill's Towing and then continues out of town.

Short Street goes from the old oak tree to (7,0).

Baldwin Road goes from (-6, 0) straight up to Grandpa's farm and stops there.

Side Street goes from the town hall to the car wash.

Bad Boy Alley goes from (-2, -2.5) to the police station and then to Bill's Towing. It ends at Junk Yard Road.

Apple Orchard Drive goes from point (2, 0) to Uncle Ben's house.

The tractor path runs from Grandpa Baldwin's farm past the town hall and ends at Main Street. This is a dirt road, so make it brown.

Oak Street goes from the old oak tree to the general store.

Goat Path goes from Grandpa Baldwin's Farm to Uncle Ben's house. This is a dirt road, so make it brown.

Additional directions and Questions:

1. Turtle Pond sits almost perfectly in the small rectangle between Side Street and Main Street. Color the pond brown and estimate its area.
   Approximate area of Turtle Pond: _____

2. School Park sits in the triangle formed by the three schools in town. Color this park orange and find its area.
   Area of School Park: _____

3. Grandpa Baldwin owns a huge apple orchard. It has lovely white split rail fencing all along the tractor path, Goat Path, Apple Orchard Drive and Main Street. Lightly shade the apple orchard green and make at least 20 red dots in the orchard to represent apple trees. What is the area of Grandpa Baldwin's apple orchard?
   Area of the apple orchard: _____

Extra Credit

4. Many weekends, you spend the night at Uncle Ben's with your cool cousin. Sometimes, you sneak out and take a shortcut through the woods from Uncle Ben's to the old oak tree to meet some friends and hang out. What is the distance in city blocks of this shortcut (assume one block of the graph paper is one city block).

        Distance of shortcut through the woods: _____

5. How far is it from the police station to Bill's Towing if you walk directly along Bad Boy Alley? _____

6. How far is it from the bank to the post office if you walk along Stamp Street?

    _____

7. What is the distance Grandpa drives his tractor along the tractor path if he goes to the town hall to pay taxes on the apple orchard? _____

8. If you take "the shortcut" through the apple orchard to Grandpa's farm from your house, how many city blocks will you travel? _____

9. There is a community helper fair this weekend. It is going to have booths with popcorn, fire trucks, police cars, ambulances, jumping houses for the kids, tow truck demonstrations, etc. This is going to be set up in the area enclosed by Main Street, Penny Lane, Bad Boy Alley, and Junkyard Road. Shade this area purple. How much space do the community helpers have to work with?

        Area of community helper fair lot: _____

10. When you leave for school in the morning, you usually stop by the General Store and pick up a sandwich and a soda for lunch. Then, you walk along Oak Street, turn right onto Short Street and then walk along School Street to get to MT Middle School.

In the afternoon, you have to pick up your little sister at the elementary school and walk her home. Your normal route is to leave your school and walk straight to the elementary school on A Street (you don't want to be late). You and your little sister then walk along B Street until you get to the high school. Then you turn onto School Street again and continue back the way you came to school via Short Street and Oak Street. You always stop off at the General Store for an ice cream and then walk home along Apple Orchard Drive to your house.

If each block length represents one "city block", how far do you walk each day to and from school as listed above.

        Distance you walk each day: _____