

PSSA and Keystone Exams
Summer 2023 Workshops

PSSA, Grade 4 Math

Map Shown Below

Handscoring
Anchor Set

PSSA Math: Map Shown Below (Grade 4); Anchor Set

1. A map is shown below.



There are right triangles shown in the map.

- A.** List three roads that form a right triangle.

There are roads that run parallel to Troy Ln. shown in the map.

- B.** List all the roads that run parallel to Troy Ln.

PSSA Math: Map Shown Below (Grade 4); Anchor Set

1. **Continued.** Please refer to the previous page for task explanation.

Jack claims that Farm St. is perpendicular to every road it intersects on the map.

C. Which road proves that Jack's claim is **not** correct?

D. Explain why the map does not have a line of symmetry even though it is in the shape of a rectangle.

Map Shown Below
Grade 4

Assessment Anchor this item will be reported under:

M04.C-G.1 Draw and identify lines and angles, and classify shapes by properties of their lines and angles.

Specific Anchor Descriptor addressed by this item:

M04.C-G.1.1 List properties, classify, draw, and identify geometric figures in two dimensions.

Scoring Guide:

Score	In this item, the student –
4	Demonstrates a thorough understanding of drawing and identifying lines and angles, and classifying shapes by properties of their lines and angles by correctly solving problems and clearly explaining procedures.
3	Demonstrates a general understanding of drawing and identifying lines and angles, and classifying shapes by properties of their lines and angles by correctly solving problems and clearly explaining procedures with only minor errors or omissions.
2	Demonstrates a partial understanding of drawing and identifying lines and angles, and classifying shapes by properties of their lines and angles by correctly performing a significant portion of the required task.
1	Demonstrates minimal understanding of drawing and identifying lines and angles, and classifying shapes by properties of their lines and angles.
0	The response has no correct answer and insufficient evidence to demonstrate any understanding of the mathematical concepts and procedures as required by the task. Response may show only information copied from the question.

Top Scoring Student Response And Training Notes:

Score	Description
4	Student earns 4 points.
3	Student earns 3.0 – 3.5 points.
2	Student earns 2.0 – 2.5 points.
1	Student earns 0.5 – 1.5 points. OR Student demonstrates minimal understanding of drawing and identifying lines and angles, and classifying shapes by properties of their lines and angles.
0	Response is incorrect or contains some correct work that is irrelevant to the skill or concept being measured.

A.

What?	Why?
Students must have one of these 8 combinations (order does not matter): • Olive St., Benson Ln., Lincoln Ave. • Olive St., Franklin Ln., Lincoln Ave. • Farm St., Benson Ln., Lincoln Ave. • Farm St., Troy Ln., and Lincoln Ave. • Farm St., Marlin Ln., Lincoln Ave. • Lemon St., Troy Ln., Lincoln Ave. • Lemon St., Marlin Ln., Lincoln Ave. • Lemon St., Franklin Ln., Lincoln Ave.	

(1 score point)

1 point for correct answer

OR ½ point for correctly identifying 2 roads that form a right angle

B.

What?	Why?
Marlin Ln., Franklin Ln., Benson Ln. (order does not matter)	

(1 score point)

1 point for correct answer

OR ½ point for 2 correct roads and no incorrect roads

C.

What?	Why?
Lincoln Ave.	

(1 score point)

1 point for correct answer

D.

What?	Why?
	Sample Explanation: The reason the map does not have a line of symmetry is because the roads on the map are not set up symmetrically. OR The reason the map does not have a line of symmetry is because the left side and the right side of the map are not mirror images, and the top half and the bottom half of the map are not mirror images. OR equivalent

(1 score point)

1 point for correct and complete explanation

OR ½ point for correct but incomplete explanation

[Note: throughout the item, students should not lose any credit for not including or for misidentifying Ave., Ln., or St.]

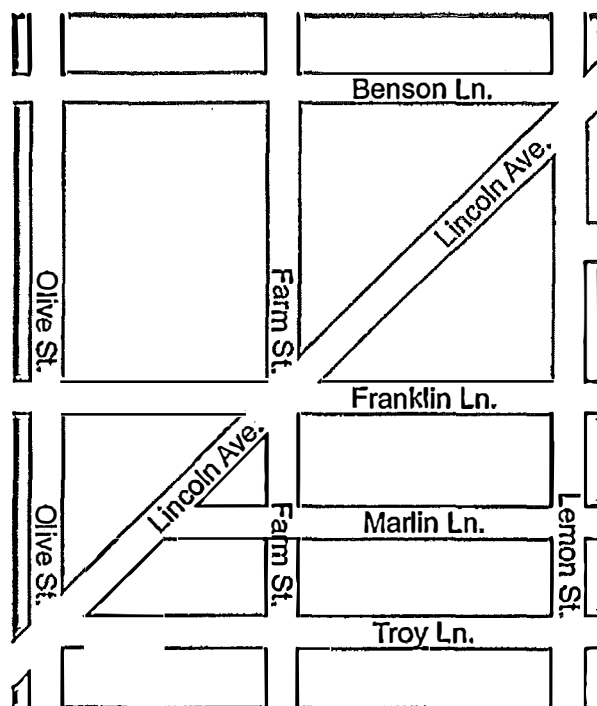


MATHEMATICS

SECTION 2



51. A map is shown below.



There are right triangles shown on the map.

- A. List three roads that form a right triangle.

Three roads that form a right triangle are Benson Ln., Lincoln Ave., and Farm St.

There are roads that run parallel to Troy Ln. shown on the map.

- B. List all the roads that run parallel to Troy Ln.

The roads parallel to Troy Ln. are Marlin Ln., Franklin Ln., and Benson Ln.

MATHEMATICS

SECTION 2

51. *Continued.* Please refer to the previous page for task explanation.

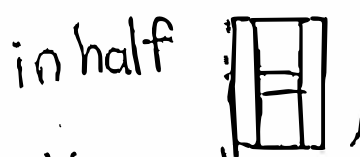
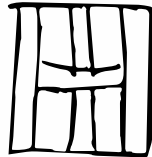
Jack claims that Farm St. is perpendicular to every road it intersects on the map.

- C. Which road proves that Jack's claim is not correct?

Lincoln Ave. is the street that proves Jack wrong.

- D. Explain why the map does not have a line of symmetry even though it is in the shape of a rectangle.

The map does not have a line of symmetry because if you fold the streets in half, each side is not the same. if you fold a streets like this



in half, you can see the sides are the same. That is why the map doesn't have a line of symmetry.

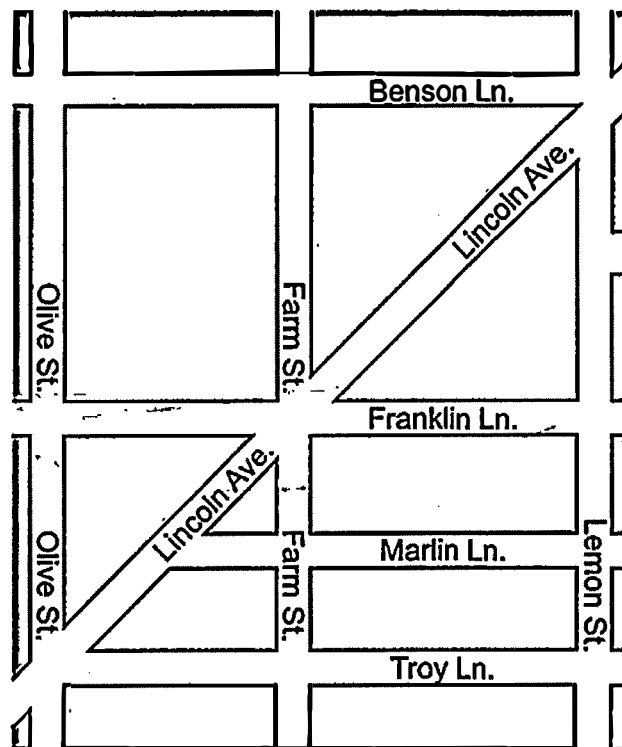


MATHEMATICS

SECTION 2



51. A map is shown below.



There are right triangles shown on the map.

A. List three roads that form a right triangle.

Lemon st. Lincoln Ave.
Franklin Ln.

There are roads that run parallel to Troy Ln. shown on the map.

B. List all the roads that run parallel to Troy Ln.

Marlin Ln. Franklin Ln.
Benson Ln.

MATHEMATICS

SECTION 2

51. *Continued.* Please refer to the previous page for task explanation.

Jack claims that Farm St. is perpendicular to every road it intersects on the map.

C. Which road proves that Jack's claim is not correct?

Lincoln Ave.

D. Explain why the map does not have a line of symmetry even though it is in the shape of a rectangle.

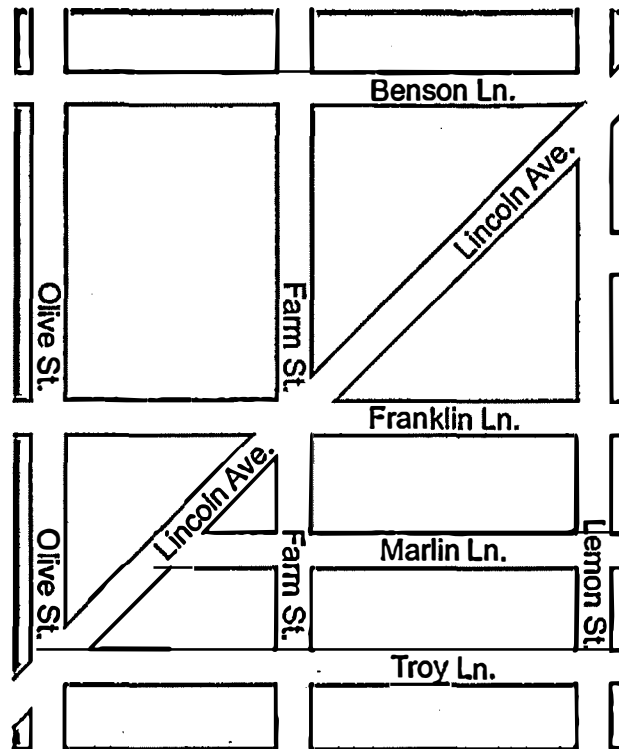
It does not have a line of symmetry because if you were to split the map in half any way the roads aren't the same.

MATHEMATICS

SECTION 2



51. A map is shown below.



There are right triangles shown on the map.

A. List three roads that form a right triangle.

Lincoln Ave., Farm St., Benson Ln.,

There are roads that run parallel to Troy Ln. shown on the map.

B. List all the roads that run parallel to Troy Ln.

Marlin Ln., Franklin Ln., Benson Ln.,

MATHEMATICS

SECTION 2



51. *Continued.* Please refer to the previous page for task explanation.

Jack claims that Farm St. is perpendicular to every road it intersects on the map.

- C. Which road proves that Jack's claim is not correct?

Lincoln Ave.

- D. Explain why the map does not have a line of symmetry even though it is in the shape of a rectangle.

The streets. What I mean is the streets are going in different directions, causing them to not be in orderly fashion.

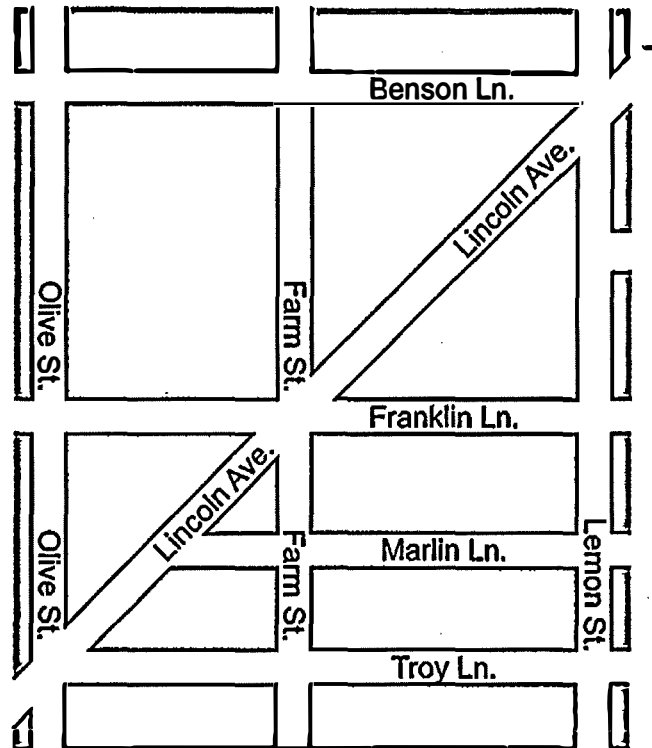


MATHEMATICS

SECTION 2



51. A map is shown below.



There are right triangles shown on the map.

A. List three roads that form a right triangle.

Lincoln Ave., Benson Ln.
Olive St.

There are roads that run parallel to Troy Ln. shown on the map.

B. List all the roads that run parallel to Troy Ln.

Marlin Ln., Franklin Ln.,
Benson Ln.

MATHEMATICS

SECTION 2

51. *Continued.* Please refer to the previous page for task explanation.

Jack claims that Farm St. is perpendicular to every road it intersects on the map.

C. Which road proves that Jack's claim is not correct?

Lincoln ave.

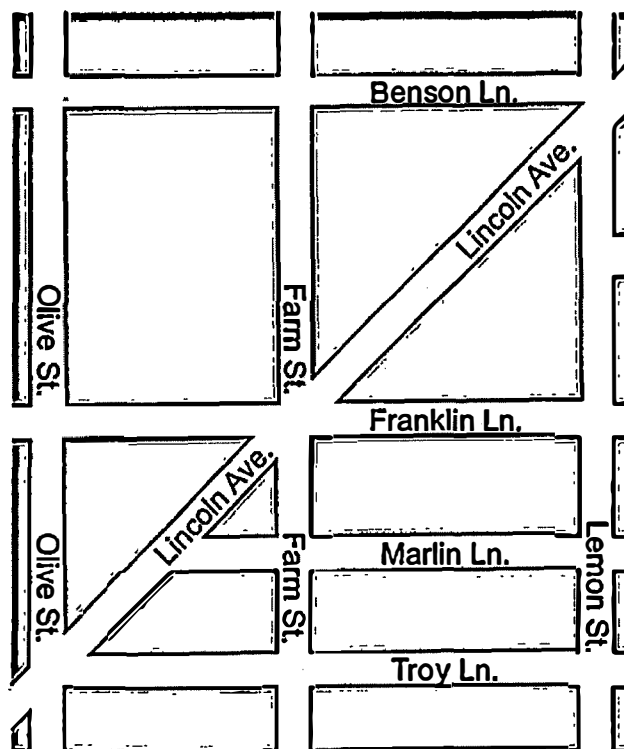
D. Explain why the map does not have a line of symmetry even though it is in the shape of a rectangle.

Because it has
other roads that
can not have a line of
symmetry through them.

MATHEMATICS

SECTION 2

51. A map is shown below.



There are right triangles shown on the map.

- A. List three roads that form a right triangle.

Lincoln Ave., Farm St., Franklin Ln.

There are roads that run parallel to Troy Ln. shown on the map.

- B. List all the roads that run parallel to Troy Ln.

Marlin Ln., Franklin Ln., Benson Ln.

F

MATHEMATICS

SECTION 2

51. *Continued.* Please refer to the previous page for task explanation.

Jack claims that Farm St. is perpendicular to every road it intersects on the map.

C. Which road proves that Jack's claim is not correct?

Lincoln Ave.

D. Explain why the map does not have a line of symmetry even though it is in the shape of a rectangle.

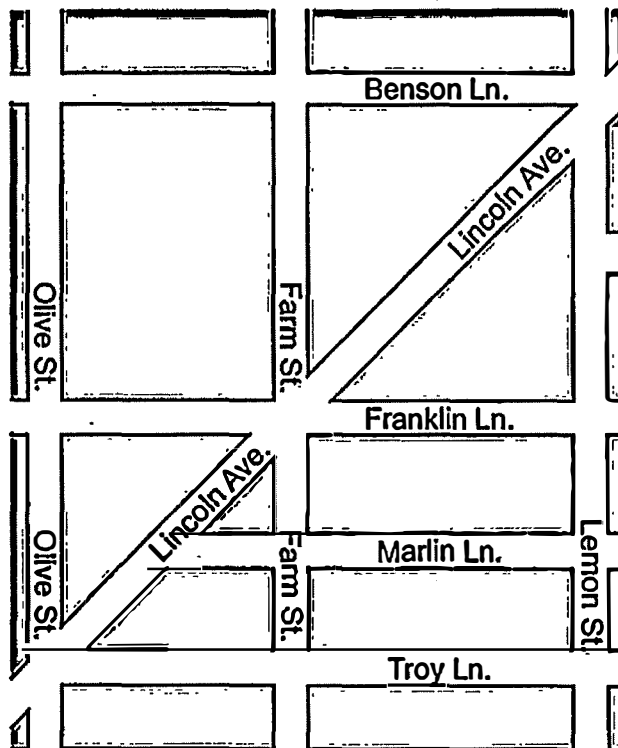
The way the map is separated by the streets makes no lines of symmetry.

MATHEMATICS

SECTION 2



51. A map is shown below.



There are right triangles shown on the map.

- A. List three roads that form a right triangle.

Benson Ln. Lincoln Ave.
Farm St.

There are roads that run parallel to Troy Ln. shown on the map.

- B. List all the roads that run parallel to Troy Ln.

Marlin Ln.
Franklin Ln.

MATHEMATICS

SECTION 2

51. **Continued.** Please refer to the previous page for task explanation.

Jack claims that Farm St. is perpendicular to every road it intersects on the map.

C. Which road proves that Jack's claim is not correct?

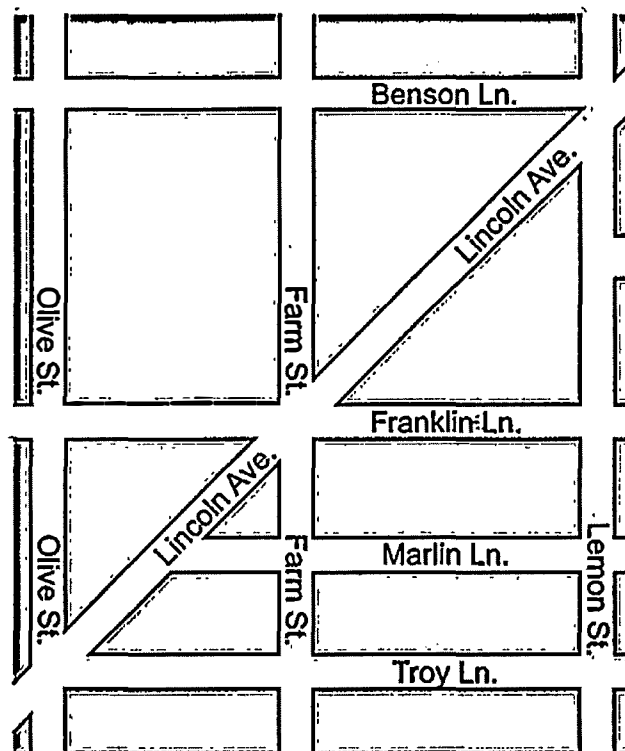
Lincoln Ave.

D. Explain why the map does not have a line of symmetry even though it is in the shape of a rectangle. *because everything is crossing each other.*

MATHEMATICS

SECTION 2

51. A map is shown below.



There are right triangles shown on the map.

A. List three roads that form a right triangle.

Farm st. Lincoln Ave
Franklin Ln. 0

There are roads that run parallel to Troy Ln. shown on the map.

B. List all the roads that run parallel to Troy Ln.

Olive st., Farm st,
Lemon st.,

MATHEMATICS

SECTION 2



51. *Continued.* Please refer to the previous page for task explanation.

Jack claims that Farm St. is perpendicular to every road it intersects on the map.

C. Which road proves that Jack's claim is not correct?

Lincon Ave.

D. Explain why the map does not have a line of symmetry even though it is in the shape of a rectangle.

because the roads are
all different and in
different places so there
is no symmetry because
the roads are all different
ways like diagonal and
straight in different places
on the map.

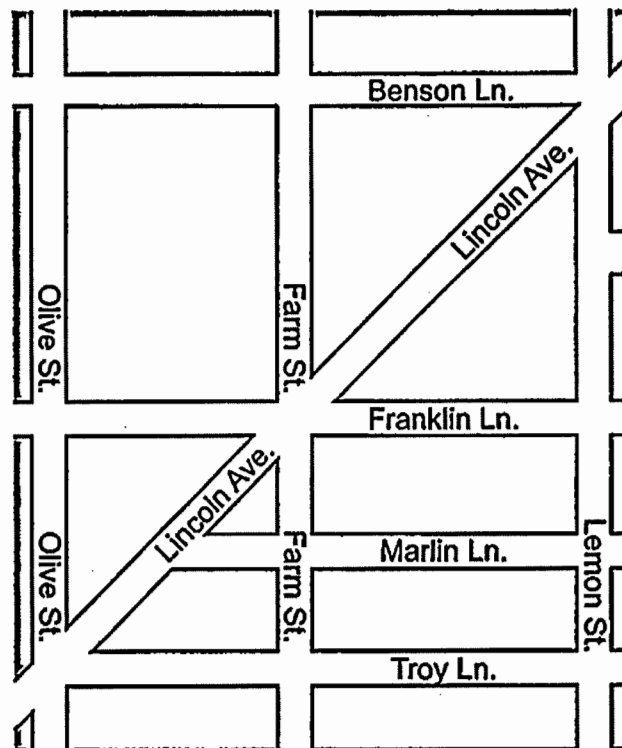


MATHEMATICS

SECTION 2



51. A map is shown below.



There are right triangles shown on the map.

- A. List three roads that form a right triangle.
 Lincoln Ave Farm Street Olive street

There are roads that run parallel to Troy Ln. shown on the map.

- B. List all the roads that run parallel to Troy Ln.
 Lemon St. Farm St Olive st.

MATHEMATICS

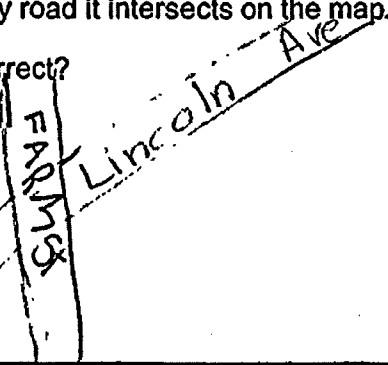
SECTION 2

51. *Continued.* Please refer to the previous page for task explanation.

Jack claims that Farm St. is perpendicular to every road it intersects on the map.

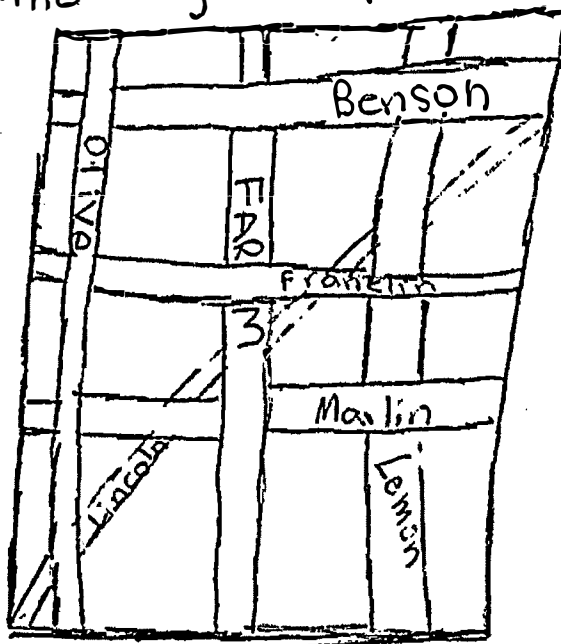
C. Which road proves that Jack's claim is not correct?

Lincoln Avenue because it crosses into the other lands and streets.
Another thing is that it's not perpendicular.



D. Explain why the map does not have a line of symmetry even though it is in the shape of a rectangle.

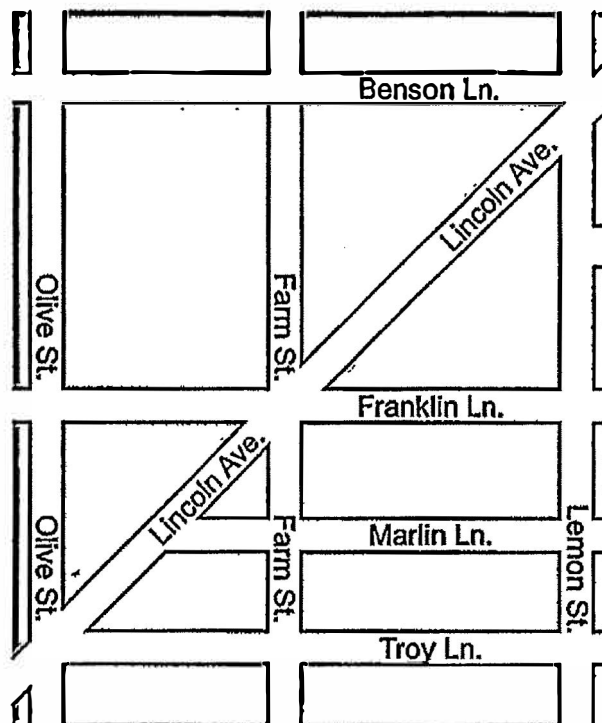
Because some of the shapes go across, some go down, some go to the side, some go up some will also cross another



MATHEMATICS

SECTION 2

51. A map is shown below.



There are right triangles shown on the map.

- A. List three roads that form a right triangle.

Lincoln Ave.
Troy Ln.
Lemon St.

There are roads that run parallel to Troy Ln. shown on the map.

- B. List all the roads that run parallel to Troy Ln.

Benson Ln.
Franklin Ln.
Marlin Ln.
Troy Ln.

MATHEMATICS

SECTION 2

51. *Continued.* Please refer to the previous page for task explanation.

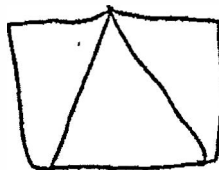
Jack claims that Farm St. is perpendicular to every road it intersects on the map.

C. Which road proves that Jack's claim is not correct?

Benson St., Lemon St.,
and Olive St.

D. Explain why the map does not have a line of symmetry even though it is in the shape of a rectangle.

It does not have a
line symmetry because
it doesn't have a
shape of triangle.

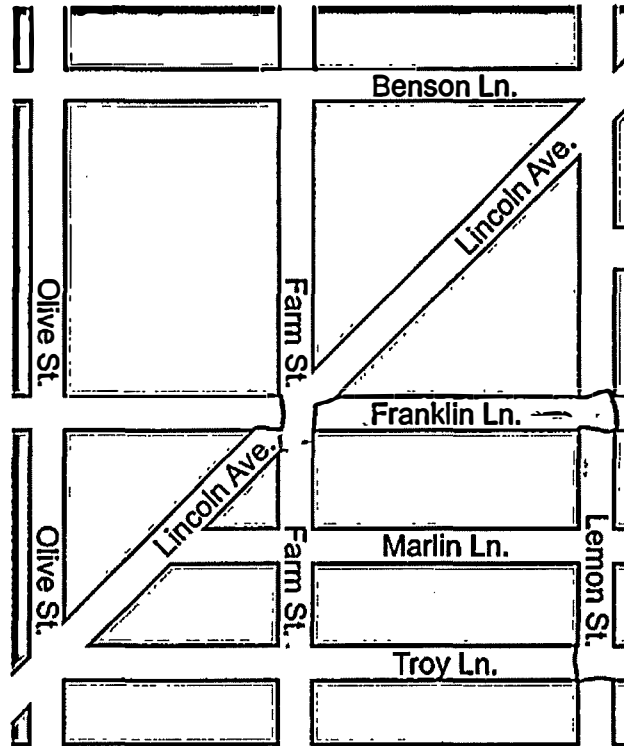


MATHEMATICS

SECTION 2

F

51. A map is shown below.



There are right triangles shown on the map.

- A. List three roads that form a right triangle.

Franklin Ln. Troy Ln.
Olive St.

There are roads that run parallel to Troy Ln. shown on the map.

- B. List all the roads that run parallel to Troy Ln.

Marlin Ln.
Franklin Ln.

MATHEMATICS

SECTION 2

51. *Continued.* Please refer to the previous page for task explanation.

Jack claims that Farm St. is perpendicular to every road it intersects on the map.

C. Which road proves that Jack's claim is not correct?

Olive St does because it
is stright up and down

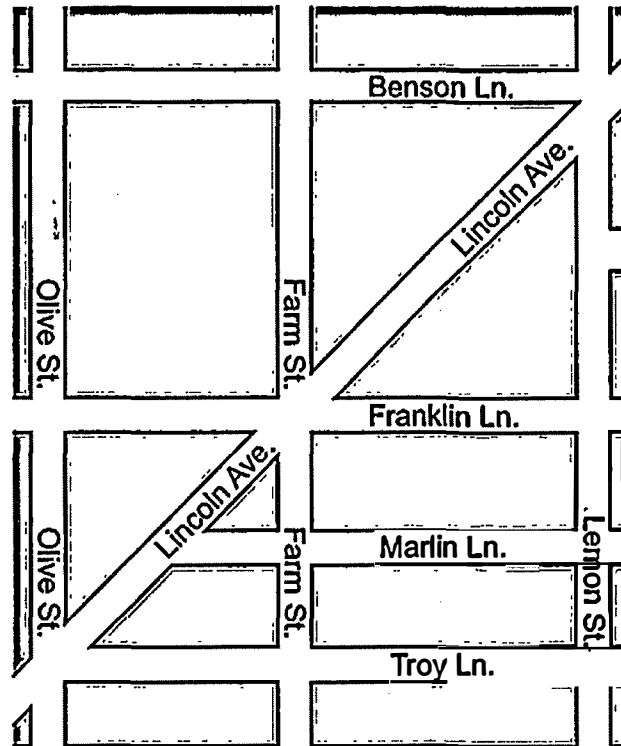
D. Explain why the map does not have a line of symmetry even though it is in the shape of a rectangle.

Because all the roads are facing
a different way.

MATHEMATICS

SECTION 2

51. A map is shown below.



There are right triangles shown on the map.

A. List three roads that form a right triangle.

Farm St. Troy Ln. Lemon St.

There are roads that run parallel to Troy Ln. shown on the map.

B. List all the roads that run parallel to Troy Ln.

Lincoln Ave. Franklin Ln. Olive St.



MATHEMATICS

SECTION 2



51. *Continued.* Please refer to the previous page for task explanation.

Jack claims that Farm St. is perpendicular to every road it intersects on the map.

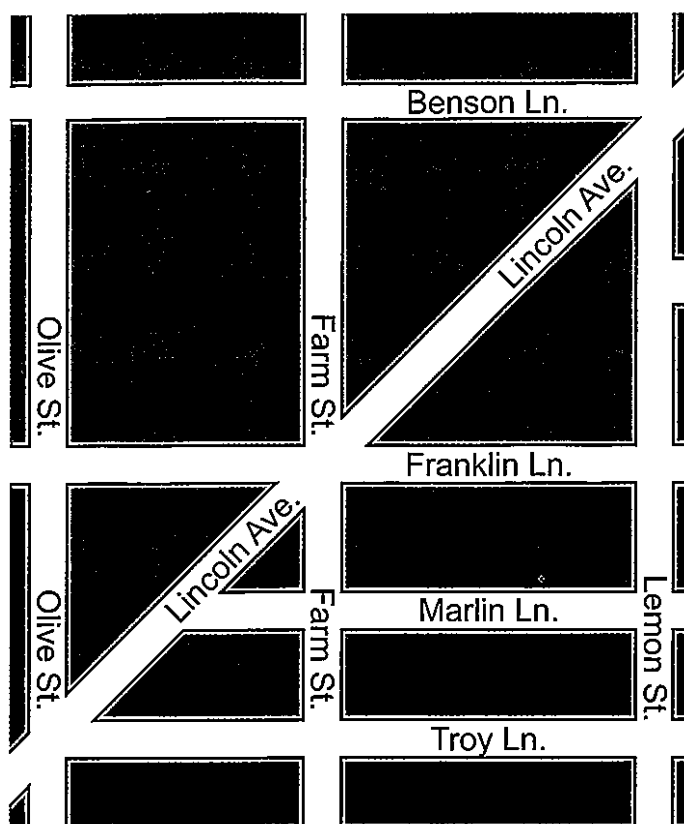
C. Which road proves that Jack's claim is not correct?

Farm St. intersects
with Troy Ln.

D. Explain why the map does not have a line of symmetry even though it is in the shape of a rectangle.

because a rectangle
can have a line of
symmetry

25. A map is shown below.



There are right triangles shown on the map.

A. List three roads that form a right triangle.

Olive St. Farm St. Lincoln Ave.

There are roads that run parallel to Troy Ln. shown on the map.

B. List all the roads that run parallel to Troy Ln.

Farm St. Lincoln Ave. Lemon St. Marlin Ln.

25. **Continued.** Please refer to the previous page for task explanation.

Jack claims that Farm St. is perpendicular to every road it intersects on the map.

C. Which road proves that Jack's claim is **not** correct?

LEMOA St.

D. Explain why the map does not have a line of symmetry even though it is in the shape of a rectangle.

BECAUSE the some
St. are closely connected to each
other and that is
why the map does not
have a line