Name: _____ Date: _____

The Surveyor and the Missing Corner

Circle group

A property owner wants to build a fence, but no one is sure where the land ends. A land surveyor is hired to solve the puzzle. The first step is in an office, not in the field. The surveyor reads the deed, which describes the land in words. The surveyor also studies old maps and past surveys. Some old notes give distances and directions from one marker to the next, such as "from the stone, north along the creek to the oak."

In the field, the surveyor looks for the original corners. These may be iron pins, concrete monuments, or old stones buried by years of leaves and soil. A metal detector often helps find iron. When a marker turns up, the surveyor measures from it to other markers and compares the numbers with the records.

Sometimes the records do not agree, or a marker is gone. Then the surveyor must weigh the evidence. Markers that are found and fences that have stood a long time usually count for more than a guess. The oldest careful measurements usually count for more than later copies. The surveyor also talks with neighbors and follows the state's laws.

For measuring, the surveyor uses a total station, a tool that records angles and distances exactly, and satellite receivers. When the line is set, the surveyor places new markers and draws a plat, a scaled map of the land. Then the owner can build with trust. Arguments can be stopped before they start.

Questions

1. Where does the surveyor begin the work?

_____

_____

2. What might an original corner marker look like?

_____

_____

3. What tool often helps a surveyor find buried iron markers?

_____

_____

4. What does a total station do?

_____

_____

5. What is a plat?

_____

_____

6. What must a surveyor do when the records do not agree or a marker is gone?

_____

_____

7. How can a survey stop arguments between neighbors?

_____

_____

Words to know

surveyor: a person who measures land to find its exact boundaries
deed: a legal paper that shows who owns a piece of land
monuments: markers set in the ground to show where a boundary is
evidence: facts or clues that help prove something
plat: a map that shows how a piece of land is divided

Talk together (every group has these)

1. Find one fact that every group read. How did your sheet say it?
2. What did your sheet tell you that you think another group's did not? Ask them.
3. What is one question about this topic that none of the sheets answered?

Name: _____ Date: _____

The Surveyor and the Missing Corner

Triangle group

A property owner wants to build a fence, but no one is sure exactly where the land ends. A land surveyor is hired to solve the puzzle, and the first step happens in an office, not in the field. The surveyor reads the deed, which describes the property in words, and studies older maps and earlier surveys of the same land. Some old descriptions give distances and directions from one marker to the next, such as "from the stone, north along the creek to the oak."

In the field, the surveyor hunts for evidence of the original corners. These may be iron pins, concrete monuments, or old stones that have been buried by decades of leaves and soil. A metal detector often helps to find iron. When a marker turns up, the surveyor measures from it to other markers and compares the results with the records.

Sometimes the records disagree with each other, or a marker has vanished. Then the surveyor must weigh the evidence. Found markers and long-standing fences usually count for more than a guess, and the oldest careful measurements usually count for more than later copies. The surveyor also talks with neighbors and makes sure the work follows the laws of that state.

The measuring itself uses a total station, an instrument that records angles and distances precisely, along with satellite positioning receivers. When the boundary is settled, the surveyor sets new markers, draws a plat, which is a scaled map of the property, and signs it. The result lets the owner build with confidence and can prevent arguments before they start.

Questions

1. Where does the surveyor begin the work?

_____

_____

2. What might an original corner marker look like?

_____

_____

3. What tool often helps a surveyor find buried iron markers?

_____

_____

4. What does a total station do?

_____

_____

5. What is a plat?

_____

_____

6. What must a surveyor do when the records disagree or a marker is gone?

_____

_____

7. How can a survey prevent arguments between neighbors?

_____

_____

Words to know

surveyor: a person who measures land to find its exact boundaries
deed: a legal paper that shows who owns a piece of land
monuments: markers set in the ground to show where a boundary is
evidence: facts or clues that help prove something
plat: a map that shows how a piece of land is divided

Talk together (every group has these)

1. Find one fact that every group read. How did your sheet say it?
2. What did your sheet tell you that you think another group's did not? Ask them.
3. What is one question about this topic that none of the sheets answered?

Name: _____ Date: _____

The Surveyor and the Missing Corner

Square group

A property owner wishes to build a fence, but no one is entirely certain where the land actually ends. A land surveyor is hired to solve the puzzle, and the first step takes place in an office rather than in the field. The surveyor reads the deed, which describes the property in words, and studies older maps and earlier surveys of the same parcel. Some old descriptions give distances and directions from one marker to the next, such as "from the stone, north along the creek to the oak."

In the field, the surveyor searches for evidence of the original corners. These may be iron pins, concrete monuments, or old stones that have been buried beneath decades of leaves and soil. A metal detector frequently helps to locate iron. Whenever a marker turns up, the surveyor measures from it to other markers and compares the results with the written records.

Occasionally the records contradict one another, or a marker has vanished entirely. In that case the surveyor must carefully weigh the evidence. Markers that are found and fences that have stood for many years usually count for more than a guess, and the oldest careful measurements usually count for more than later copies. The surveyor also consults with neighbors and ensures that the work complies with the laws of that state.

The measuring itself relies on a total station, an instrument that records angles and distances with great precision, along with satellite positioning receivers. Once the boundary is settled, the surveyor sets new markers, draws a plat, which is a scaled map of the property, and signs it. The result allows the owner to build with confidence and can head off disputes before they ever begin.

Questions

1. Where does the surveyor begin the work?

_____

_____

2. What might an original corner marker look like?

_____

_____

3. What tool frequently helps a surveyor locate buried iron markers?

_____

_____

4. What does a total station do?

_____

_____

5. What is a plat?

_____

_____

6. What must a surveyor do when the records contradict one another or a marker has vanished?

_____

_____

7. How can a survey head off disputes between neighbors?

_____

_____

Words to know

surveyor: a person who measures land to find its exact boundaries
deed: a legal paper that shows who owns a piece of land
monuments: markers set in the ground to show where a boundary is
evidence: facts or clues that help prove something
plat: a map that shows how a piece of land is divided

Talk together (every group has these)

1. Find one fact that every group read. How did your sheet say it?
2. What did your sheet tell you that you think another group's did not? Ask them.
3. What is one question about this topic that none of the sheets answered?

For the teacher: The Surveyor and the Missing Corner

Each student sheet carries a shape, not a level. The same topic and facts, written three ways.

Circle: The Surveyor and the Missing Corner

Easier · 248 words · Flesch-Kincaid grade 5.7

1. In an office, reading the deed and studying old maps and surveys.
2. An iron pin, a concrete monument, or an old stone.
3. A metal detector.
4. It records angles and distances exactly.
5. A scaled map of the land.
6. Weigh the evidence, such as found markers, fences, and the oldest careful measurements.
7. It settles exactly where the line is before anyone builds.

Triangle: The Surveyor and the Missing Corner

This passage · 266 words · Flesch-Kincaid grade 8.5

1. In an office, reading the deed and studying older maps and surveys.
2. An iron pin, a concrete monument, or an old stone.
3. A metal detector.
4. It records angles and distances precisely.
5. A scaled map of the property.
6. Weigh the evidence, such as found markers, fences, and the oldest careful measurements.
7. It settles exactly where the boundary is before anyone builds.

Square: The Surveyor and the Missing Corner

Harder · 286 words · Flesch-Kincaid grade 9.6

1. In an office, reading the deed and studying older maps and earlier surveys.
2. An iron pin, a concrete monument, or an old stone.
3. A metal detector.
4. It records angles and distances with great precision.
5. A scaled map of the property.
6. Carefully weigh the evidence, such as found markers, long-standing fences, and the oldest careful measurements.
7. It settles exactly where the boundary is before anyone builds.