

Many of these stations have been designed as an assessment tool for the objectives of the new curriculum. However, teachers may choose to use these as introductory activities, practise activities or centre activities.

These stations lend themselves well to the adaptive dimension of the Core Curriculum. See The Adaptive Dimension in the Core Curriculum available in all schools. The document can be ordered from the Book Bureau (#1655). Changes can be made to the context or to the level of difficulty to adapt to the individual needs in your classroom.

Similar stations can be created by using activities from textbooks and other resources.

Binders that accompany manipulatives are an excellent source of ready-made activities.

<i>Name</i>	<i>Distributor</i>	<i>Where to Order</i>	<i>Order #</i>	<i>Cost</i>
Pattern Blocks Activities for the Intermediate Grades (Active Learning Series)	Exclusive	Book Bureau	7191	\$32.60
The Geoboard Collection 7-9 (Active Learning Series)	Exclusive	Exclusive	0089	\$31.00
The Complete Book of Cube-A-Link 5-8 (Active Learning Series)	Exclusive	Book Bureau	1667	\$37.20
Measure It 4-6 (Active Learning Series) - (good for ideas)	Exclusive	Book Bureau	0087	\$31.50
The Puzzling World of Tangrams and Pentominoes	Exclusive	Exclusive	0047	\$34.95
Mira Math Activities Elementary Book	Exclusive	Book Bureau	7195	\$8.35
Connections Grade 8 (Creative Publications)	Addison-Wesley Publishers	Addison-Wesley Publishers	SC5-0-56107-058-0	\$30.75
Pentominoes Activities Lessons and Puzzles (Creative Publications)	Addison-Wesley Publishers	Addison-Wesley Publishers	SC5-0-88488-374-4	\$44.80
Moving-On (4-6) Pattern Blocks (Creative Publications) - (good for low achievers and special needs)	Addison-Wesley Publishers	Addison-Wesley Publishers	SC5-0-88488-672-7	\$35.70
Moving-On (4-6) Tangrams (Creative Publications) - (good for low achievers and special needs)	Addison-Wesley Publishers	Addison-Wesley Publishers	SC5-0-88488-671-9	\$35.70
Moving-On (4-6) Geoboards (Creative Publications - (good for low achievers and special needs))	Addison-Wesley Publishers	Addison-Wesley Publishers	SC5-0-88488-670-0	\$35.70

NOTE: Check Addison-Wesley catalogues for ready-made job cards for many of the manipulatives including geoblocks. Exclusive also produces new binders every year. The *Book Bureau* will soon stock many of these resources. They are often cheaper there and there are no shipping charges.

## Getting ready . . .

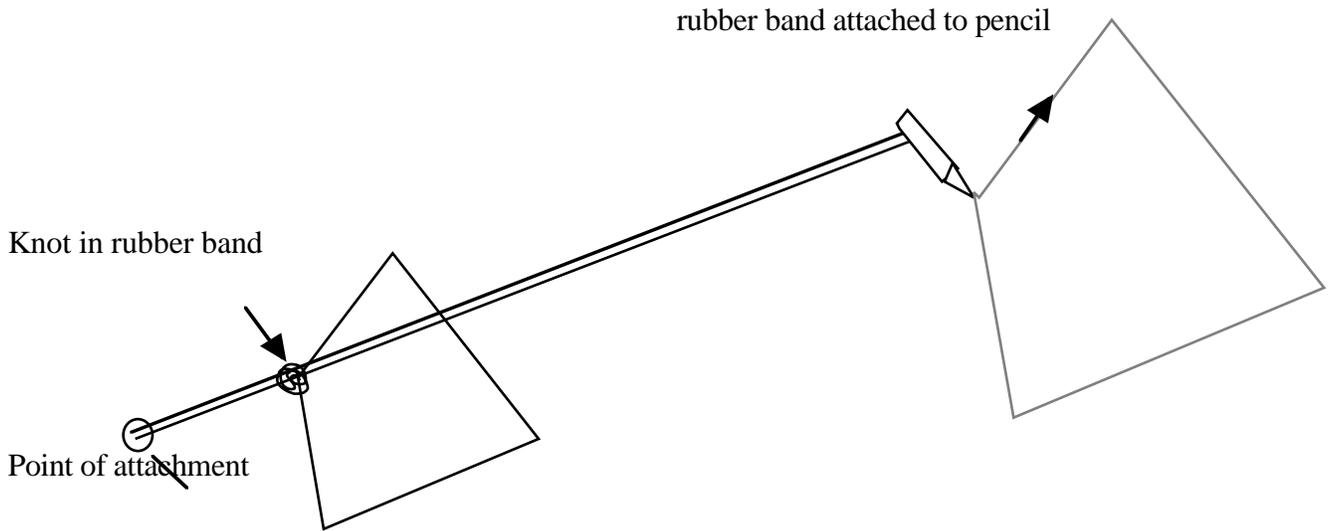
**Please note:** To save on the cost of photocopying, the graph paper for the following stations is provided at the end of these teacher notes. Add the station number on your master before photocopying.

**STATIONS: 9, 10, 11, 12, 14, 19, 22, 24**

- Station # 2** Circular protractors are recommended to develop the concept of “360° ; however, the semi circles also work if teachers assist students in determining which of the dual scales to use. Students should use the 90° angle as a benchmark.
- You can “make” protractors by photocopying an original one, cut and paste it several times on sheet of paper and then making an overhead transparency. Individual protractors can then be cut out for use. You may have to experiment with the first copy until the numbers are clear by adjusting the lighter to darker feature on your photocopier. A very inexpensive way to make protractors!!!
- Station # 3** Students should have their own geometry sets. Please encourage them to purchase good instruments. It is important that compasses screw or lock into place because they get frustrated when their compasses constantly open as they use them. For classroom management: have a few geometry sets available to use at stations. This limits the walking around and students having to borrow from others. You also ensure that good instruments are used for the assessment. Where students cannot purchase their own set slowly purchase a few from year to year until you have a class set or at least one for every pair of students.
- Station # 4** Students should recognise that these polygons are all quadrilaterals. One polygon, “B” is concave while the others are convex. They should also make the distinction between F and G and between H and I. “F” is an isosceles trapezoid, “H” is a kite, and “I” is a rhombus.
- Station # 5** Copy the triangles that are provided with the station onto manila tag or cardboard. Foam board available at office supply stores also works well. Make the triangles for the first activity a different color from the triangles in the second activity to facilitate sorting.
- Station # 6** Plastic pentominoes are available commercially. A pattern is available for you to copy on manila tag for students to cut out. Have students store their sets individually in envelopes. You can also cut these from foam board available at office supply stores.
- Station # 7** This is an excellent method to show students the concept of scale drawings. The machines usually use percentage.

**Station # 9**

A pantograph is an instrument constructed of pins and rods in the form of a collapsible parallelogram. Drafting engineers or designers use the instrument to enlarge or reduce a diagram. A simple model of a pantograph is a collapsible gate. To make a pantograph, use pins and rubber bands. *Graph paper is provided after the teacher notes.*



Trace the figure in a new area by sliding the knot on the rubber band along the original figure.

**Station # 10**

See station 2 for ideas about protractors.

**Station # 15**

3-D shapes are available commercially both in wood and in plastic. When purchasing consider sets such as the set from Addison-Wesley because these open and students can use them for volume, surface area and capacity experiments. It is important for students to make connections with the real world. Collect boxes of different shapes (Toblerone bars, OXO cubes, etc.) The riddles on the file cards can be used for quick oral math activities or in a math centre.

**Station # 21**

Provide a fairly large circle in cardboard or a plastic lid (such as a lid from an ice cream pail). It is better if the circumference of the circle does not exceed one metre.

This concept can be developed by actually using different bicycles and having students experiment and record data.

**Station # 26**

For ideas about protractors see station 2 comment.

**Station # 28**

Provide cylinders such as used cans of different sizes: soup cans, corn cans, large juice cans, frozen juice can, salmon cans, very large popcorn tins etc. You may even provide cylinders cut from dowels.

**Station # 29**

Triangular prisms are sometimes found in science labs (used for light experiments). Wooden mouldings can be cut into workable sizes. Plastic prisms are available commercially.

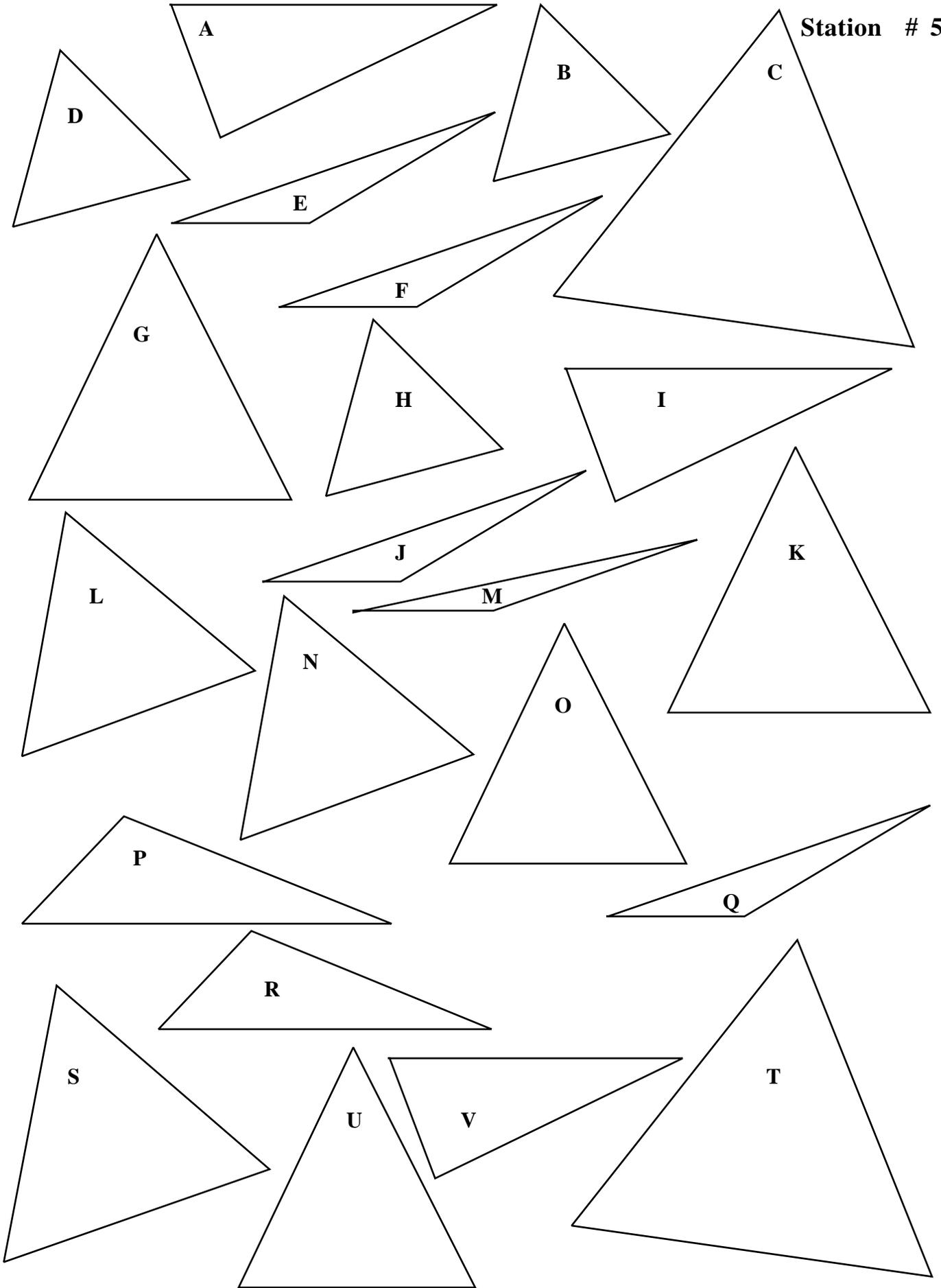
**Station # 31**

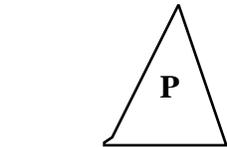
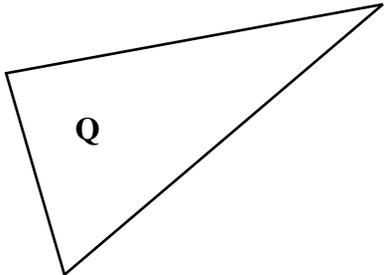
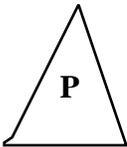
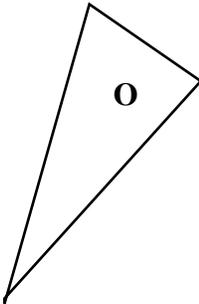
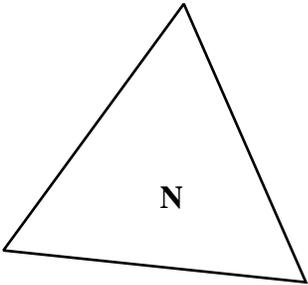
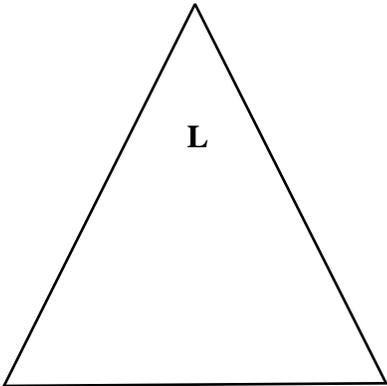
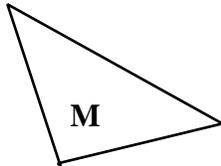
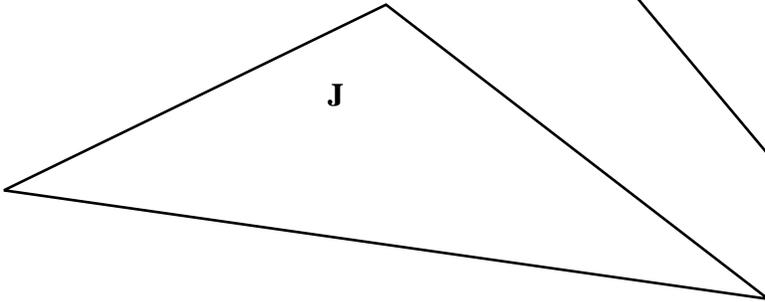
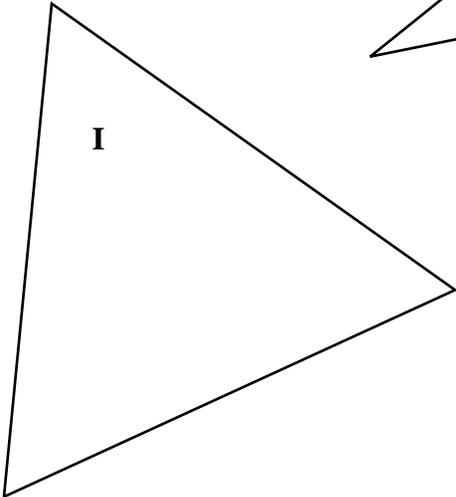
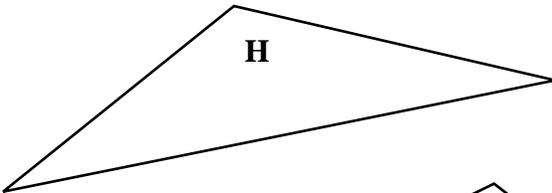
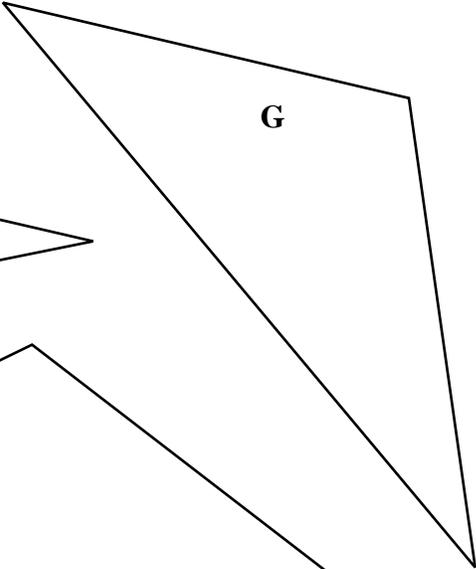
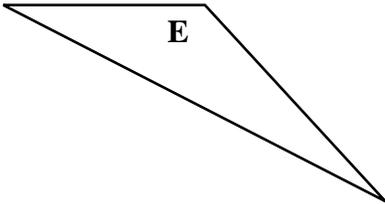
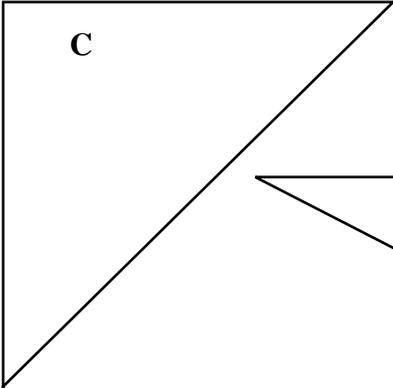
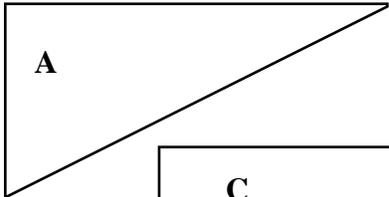
You can use boxes other than jelly boxes. These were suggested because of their size. They are small enough so as not to require a large number of cubes. Individual cereal boxes work well.

**Station # 32**

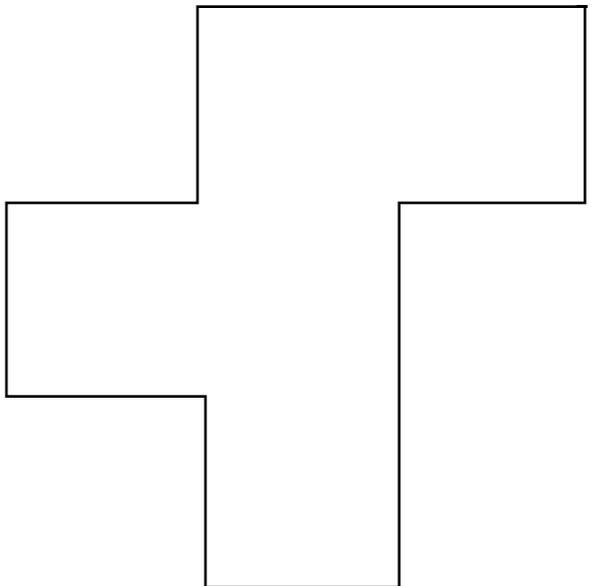
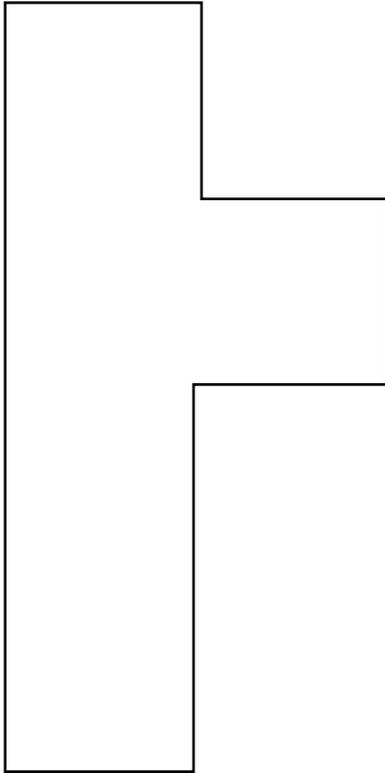
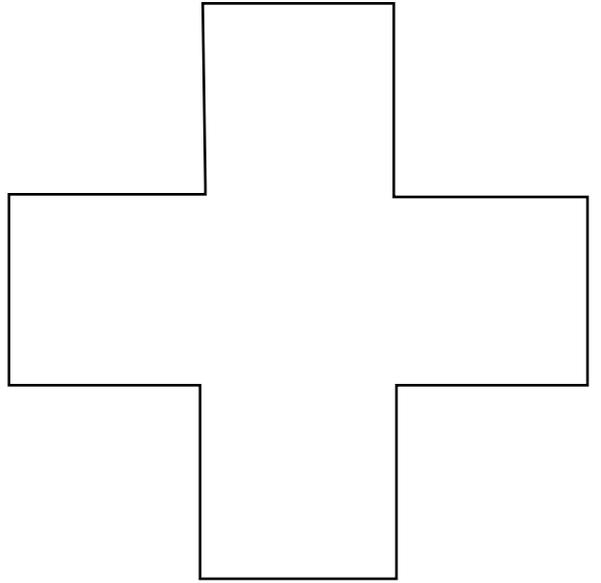
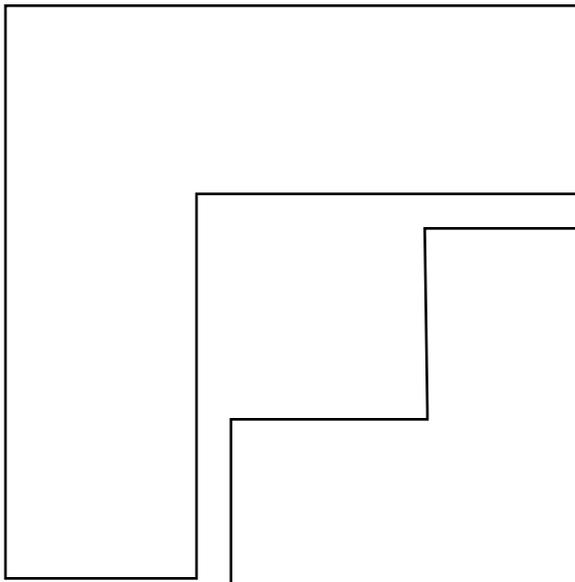
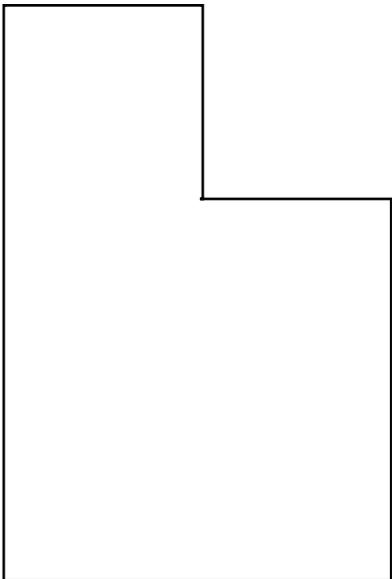
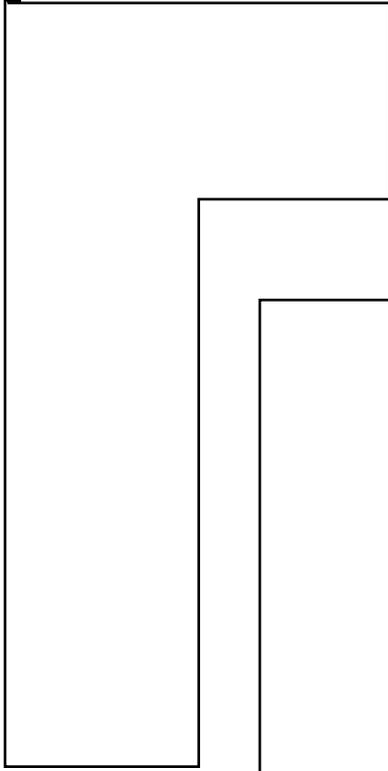
See Station 28, 29, and 31 for ideas about cylinders and prisms.

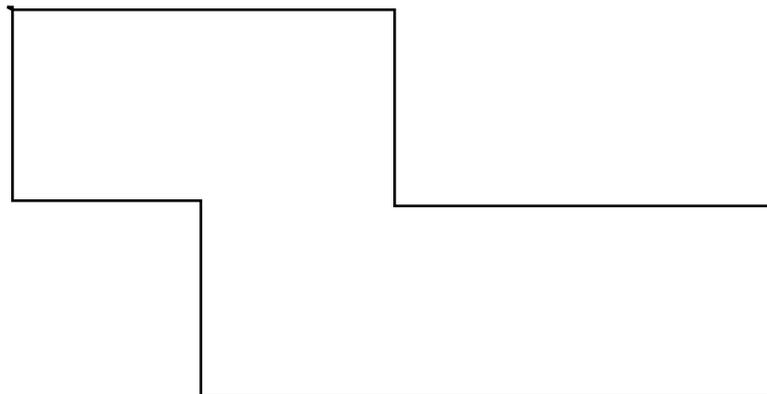
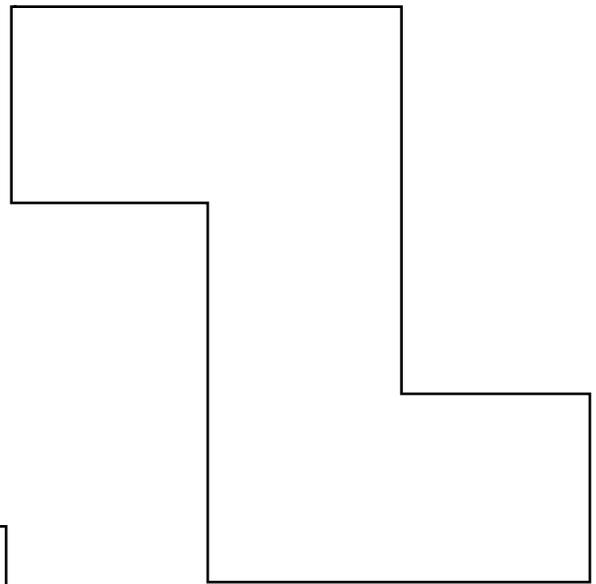
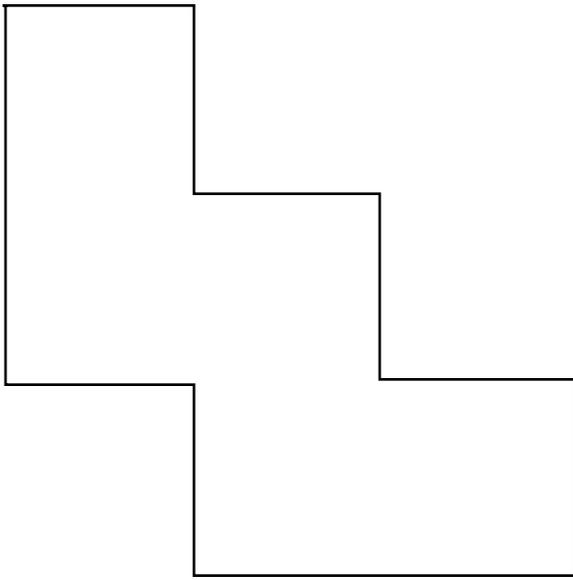
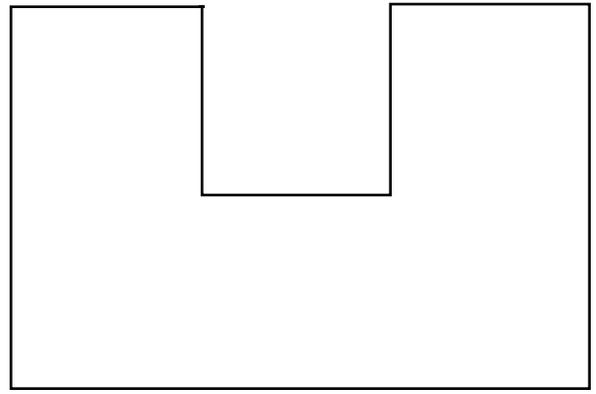
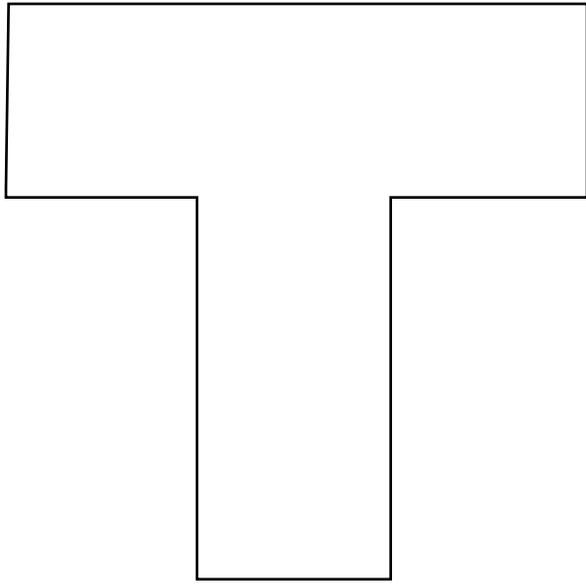
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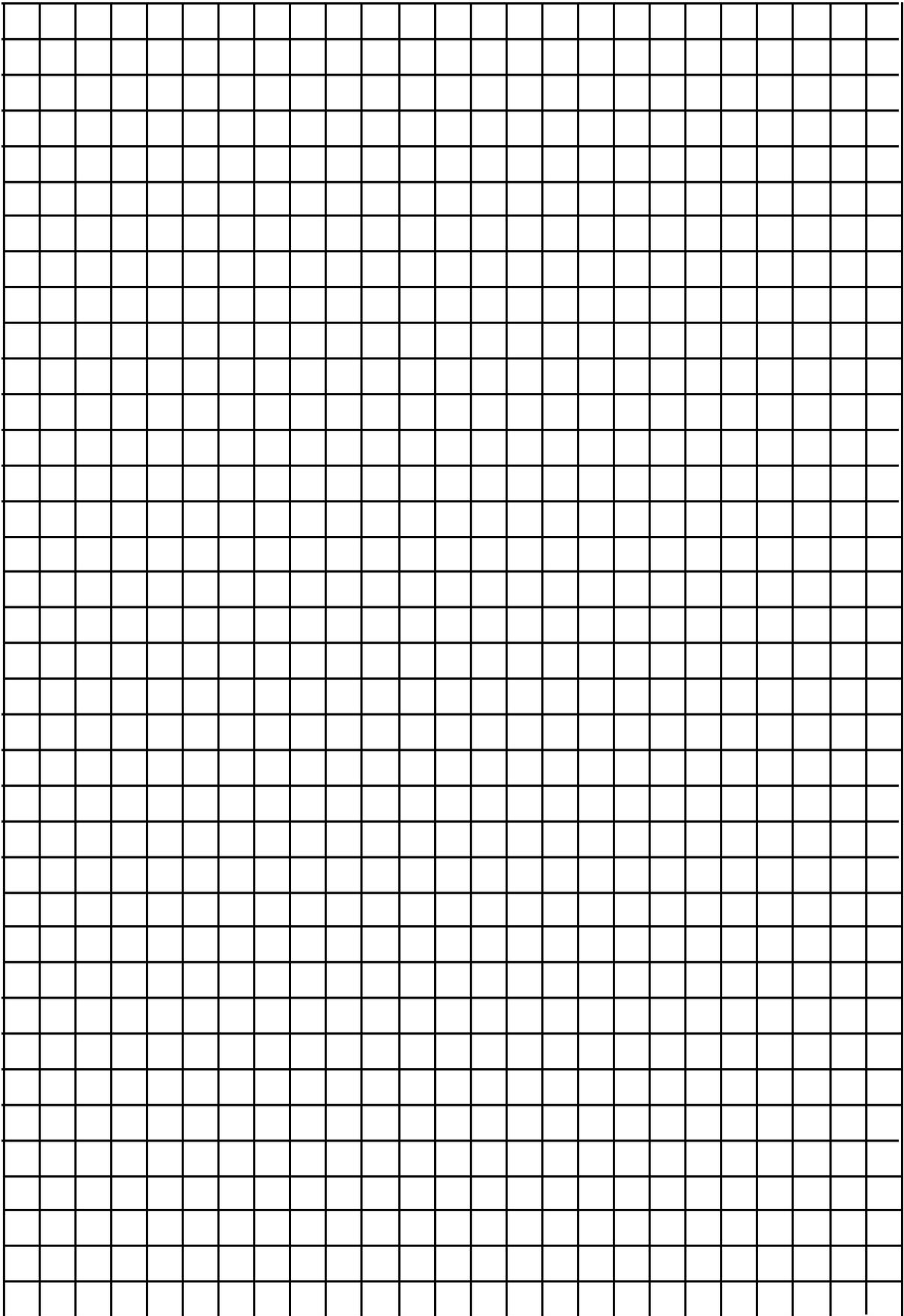
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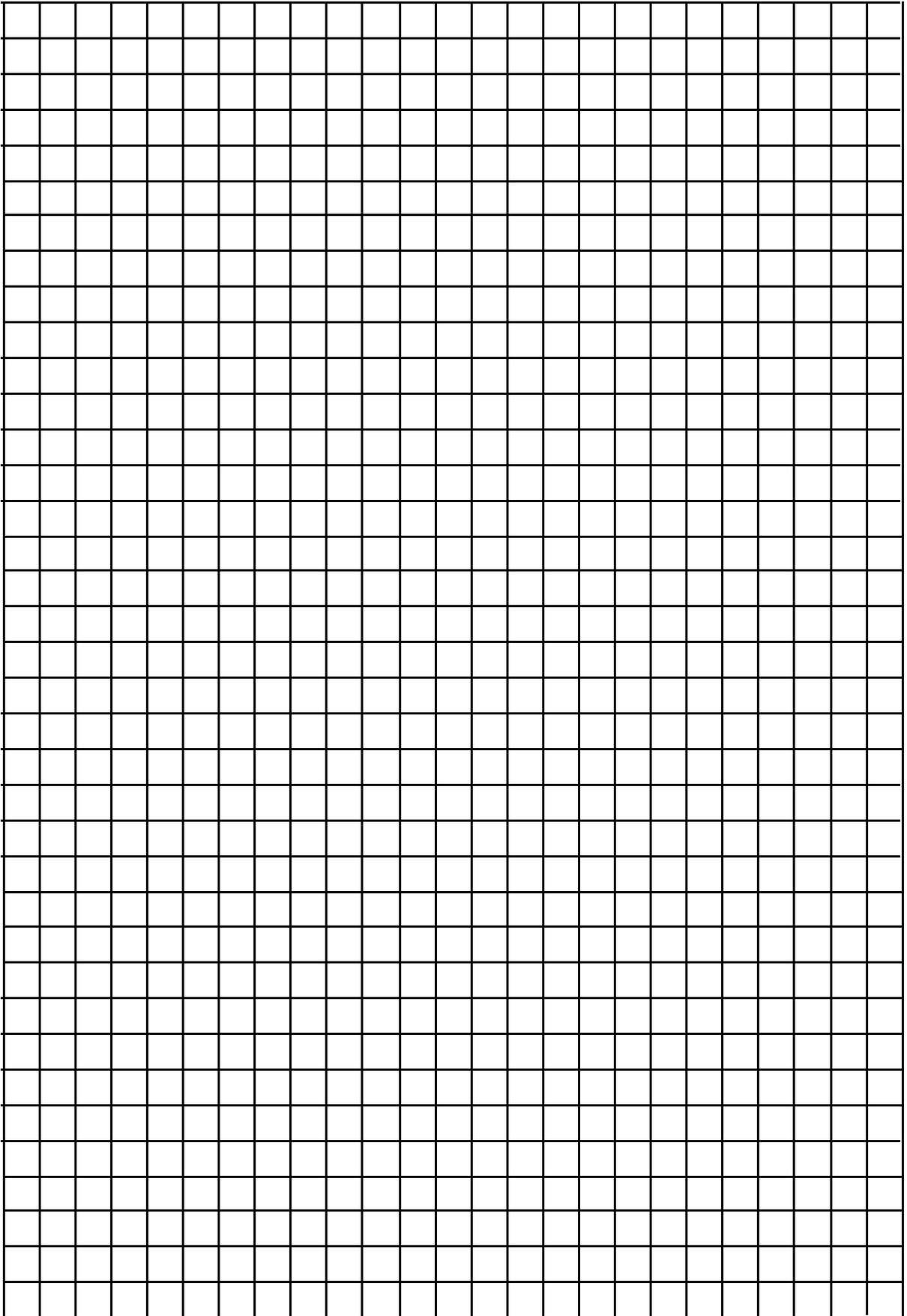


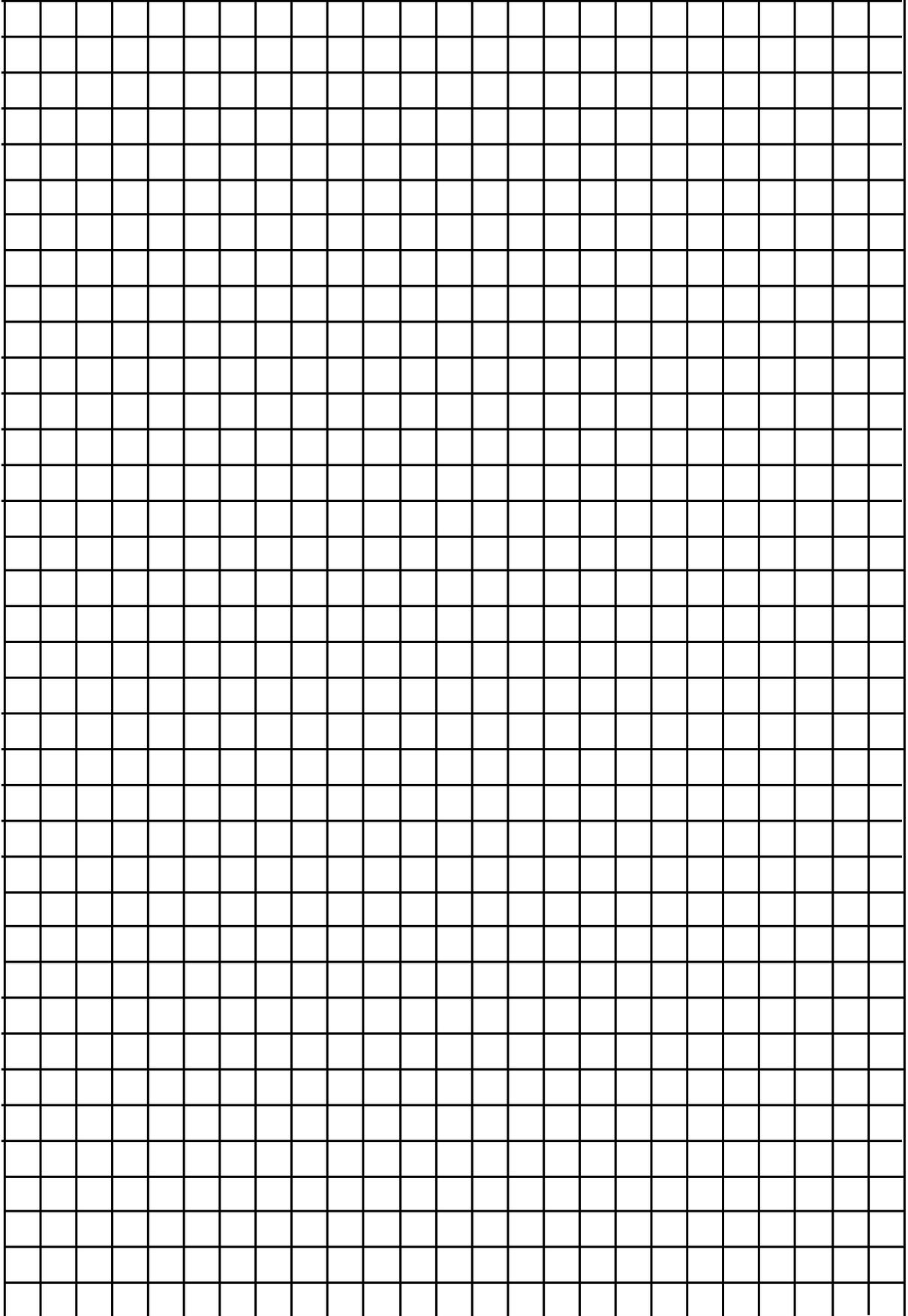


# Geometry/Measurement

# Station #

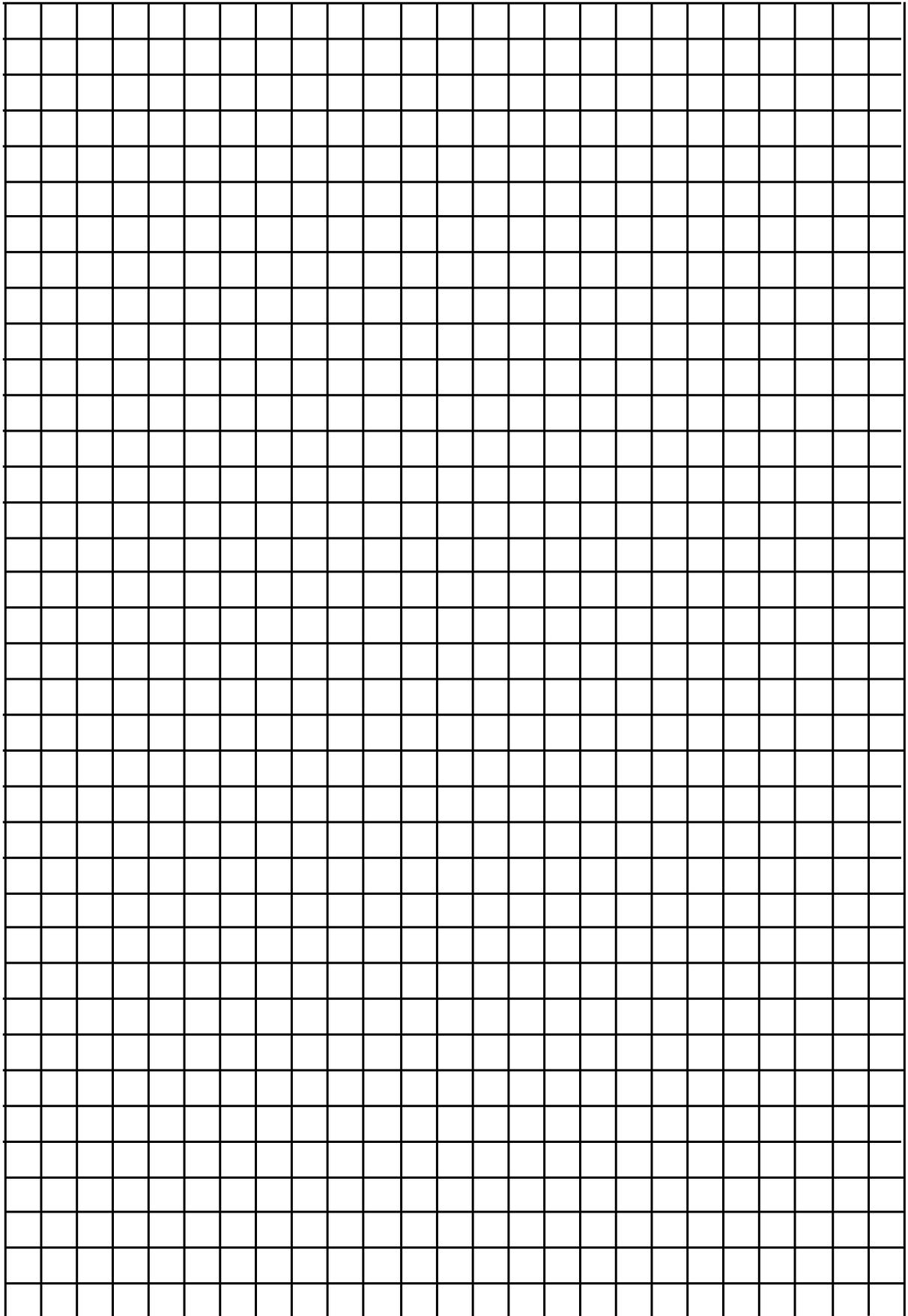






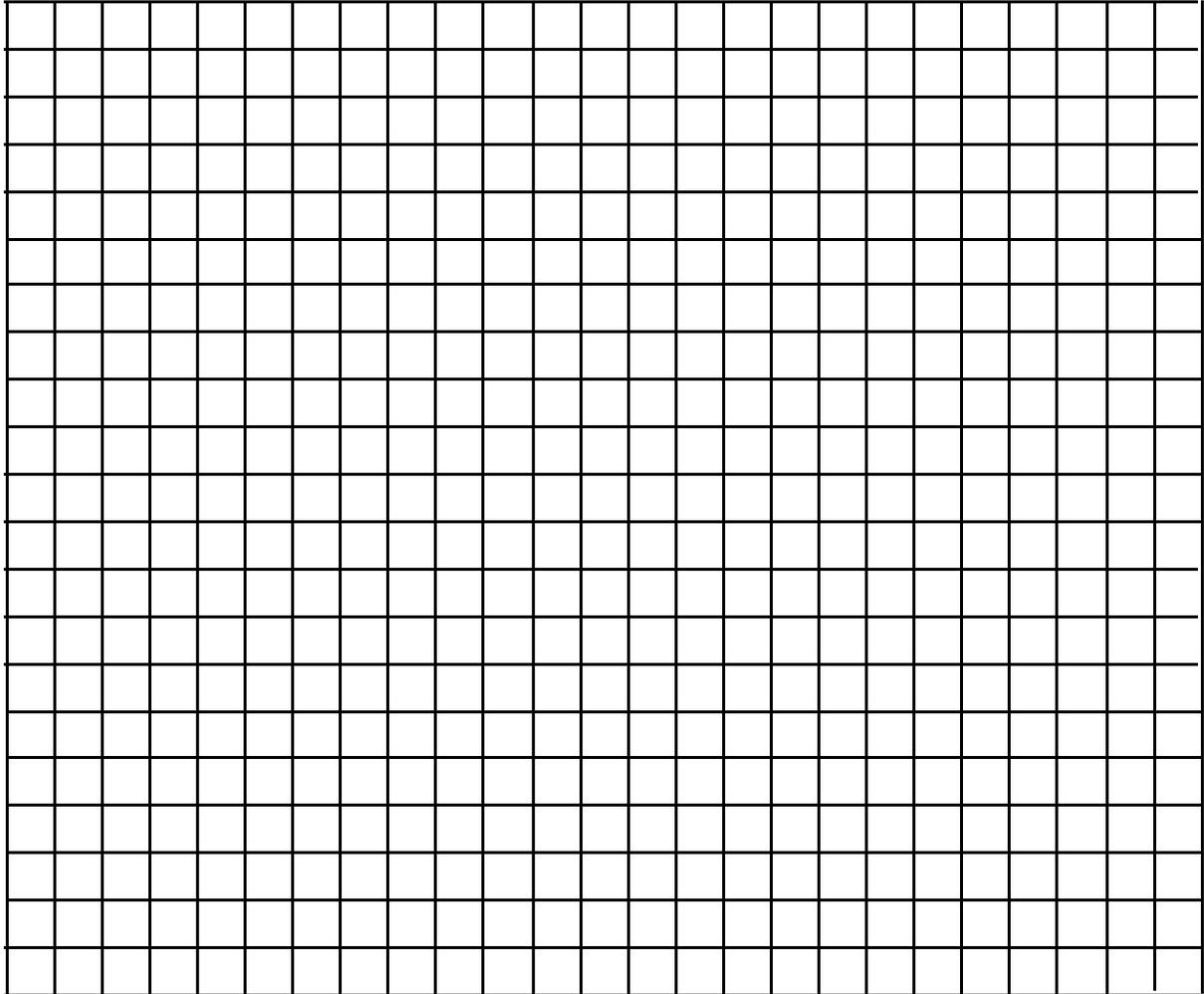
**Geometry/Measurement**

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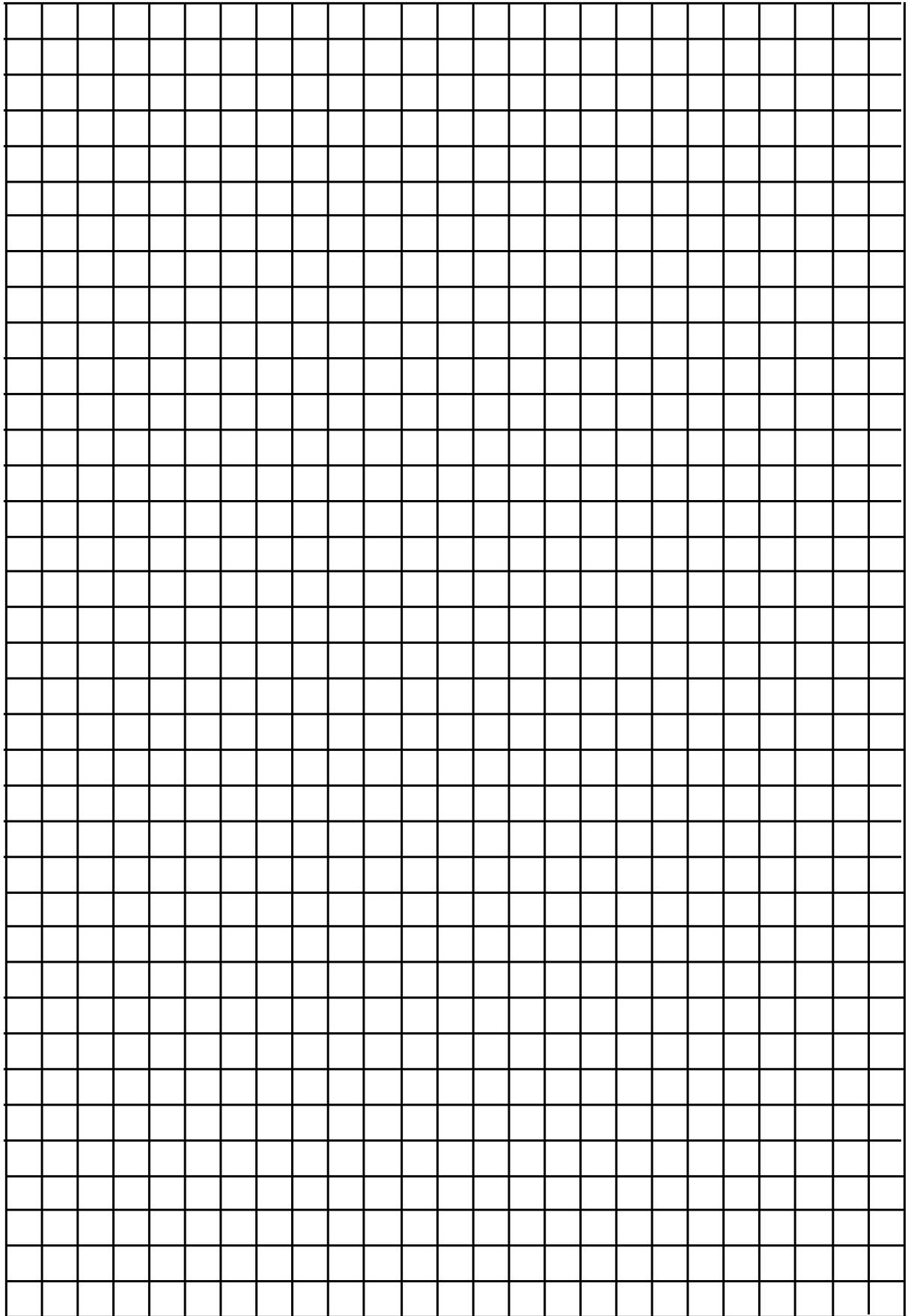
**Geometry/Measurement**

**Station # 13**



**Geometry/Measurement**

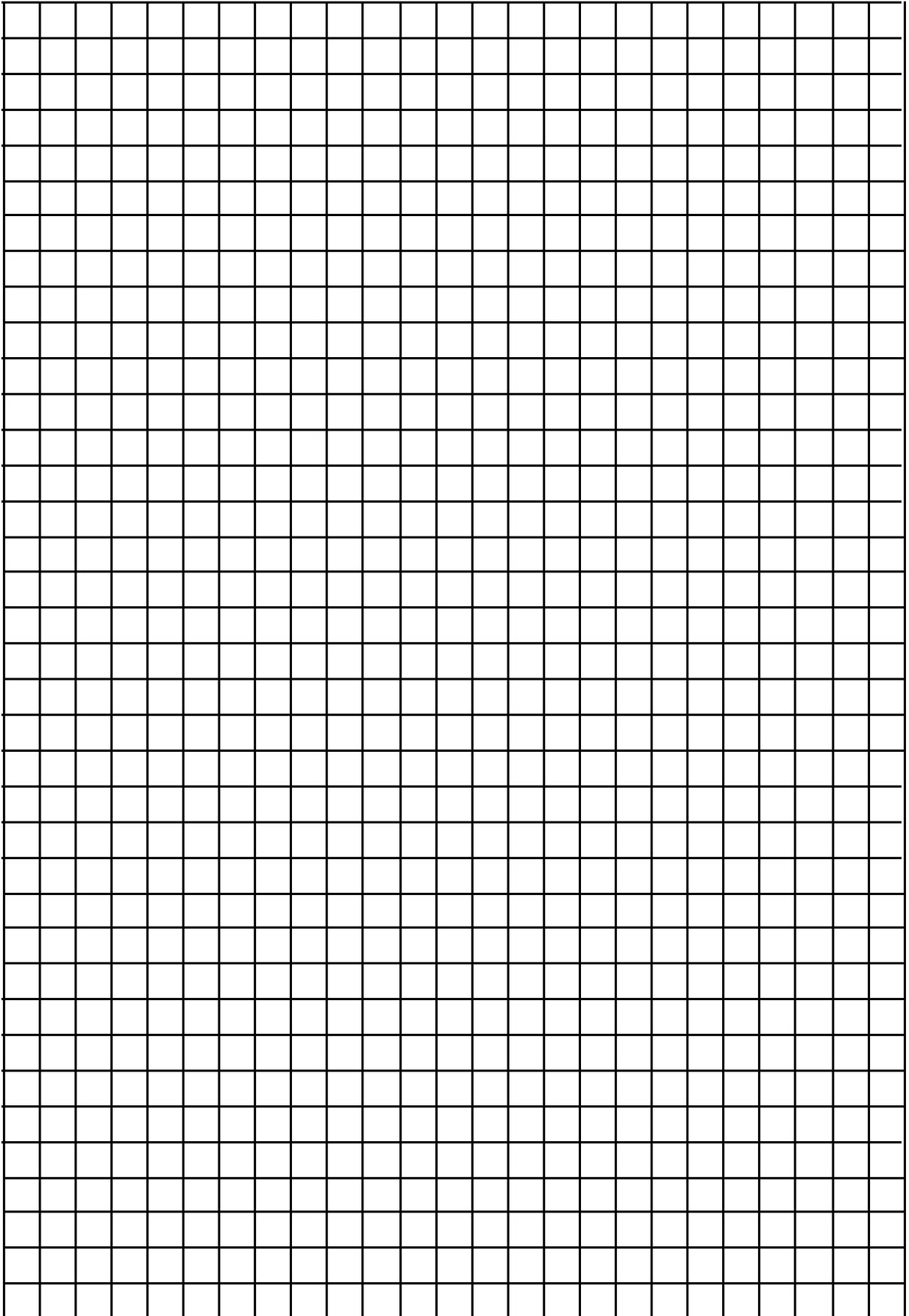
**Station # 14**





**Geometry/Measurement**

**Station # 19**



**Geometry/Measurement**

**Station # 22**

