

Set C4 ★ Independent Worksheet 1



INDEPENDENT WORKSHEET

Points, Lines, Line Segments, Rays & Angles

1 Use this drawing to answer questions 1a, b, and c.



a This is a drawing of a (circle one)

line

line segment

ray

angle

point

b What do the arrows on either end mean?

c The name of this figure is (circle one)

\overline{AB}

\overleftrightarrow{AB}

\vec{AB}

$\angle AB$

2 Use your pencil, ruler, and Points C and D below. Draw line segment \overline{CD} .



a Why aren't there arrows at either end of your line segment?

b How long is \overline{CD} ? (Measure it to the nearest quarter inch.)

c What is the difference between a line segment and a line?

3 Use this drawing to answer questions 3a and b.



a This is a drawing of a (circle one)

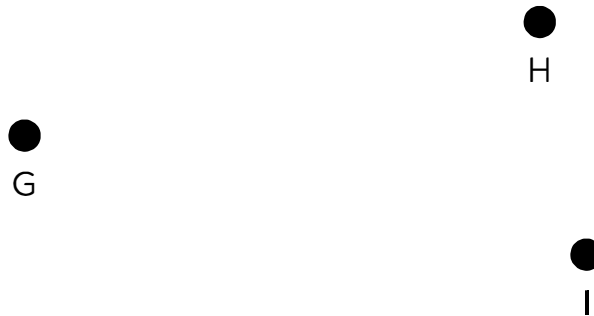
- line line segment ray angle point

b The name of this figure is (circle one)

- \overline{EF} \overleftrightarrow{EF} \overrightarrow{EF} $\angle EF$

4 Use your pencil, ruler, and Points G, H, and I below.

- Draw ray GH.
- Draw ray GI



a The figure you just drew is a (circle one)

- line line segment ray angle point

5 Look at points J, K, and L. If you make an angle by drawing ray KJ and ray KL, what kind of angle do you think you will get? (circle one)

- acute angle right angle obtuse angle



Try it. Were you right?

Set C4 ★ Independent Worksheet 2

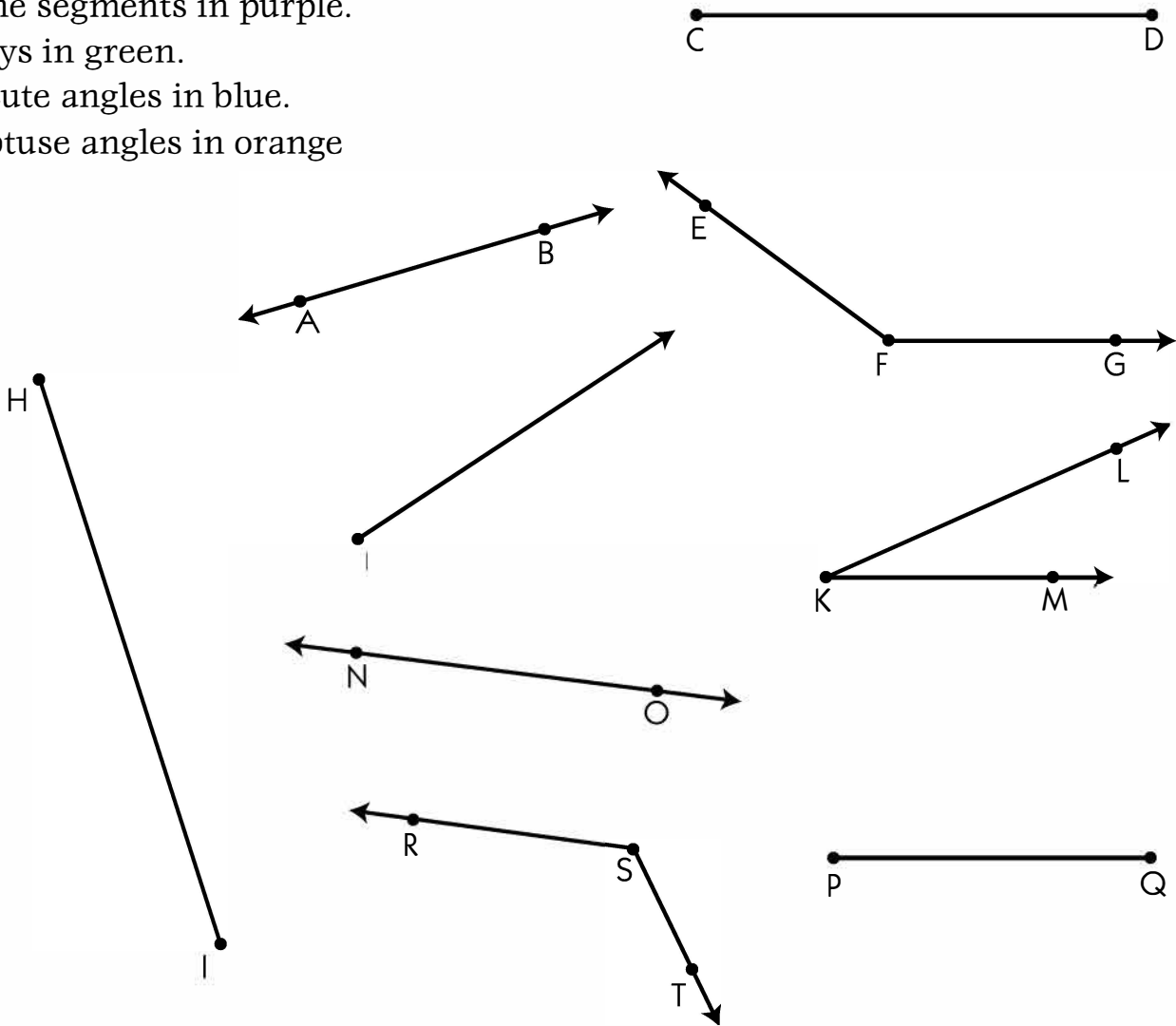


INDEPENDENT WORKSHEET

Geometry Find & Measure

1 Look at the figures on this page. Circle the

- lines in red.
- line segments in purple.
- rays in green.
- acute angles in blue.
- obtuse angles in orange



2 There are 3 line segments shown above. Measure each of them to the nearest quarter inch. Label each to show how long it is.

Set C4 ★ Independent Worksheet 3

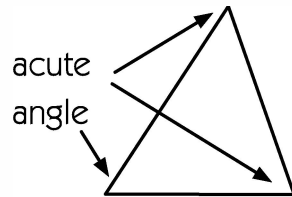


INDEPENDENT WORKSHEET

Name That Triangle!

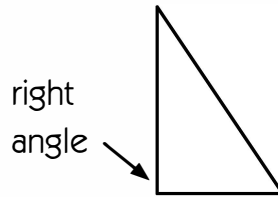
You can classify triangles by the size of their angles,

Acute Triangle



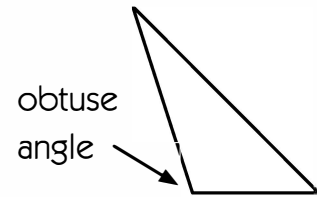
All 3 angles are acute.

Right Triangle



One of the angles is a right angle.

Obtuse Triangle

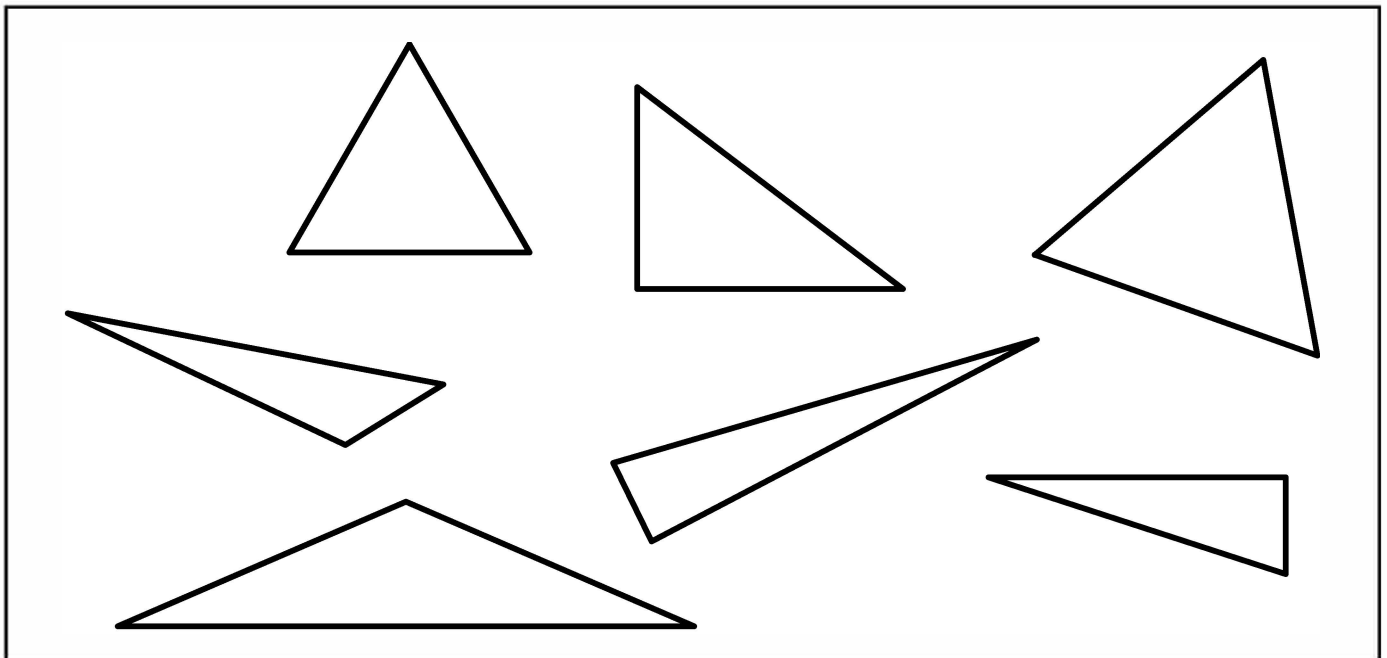


One of the angles is obtuse.

1 Look at the triangles in the box below. Color:

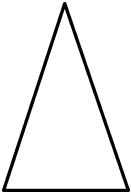
- the acute triangles green.
- the right triangles red.
- the obtuse triangles orange.

Hint Use the corner of a piece of paper, a tile, or a square pattern block to help test the angles. Some of these triangles might fool you!



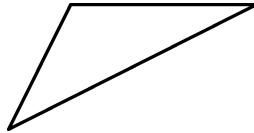
You can also classify triangles by the length of their sides.

Isosceles Triangle



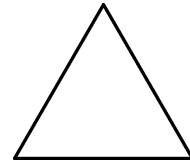
Two sides are the same length.

Scalene Triangle



Each side is a different length.

Equilateral Triangle

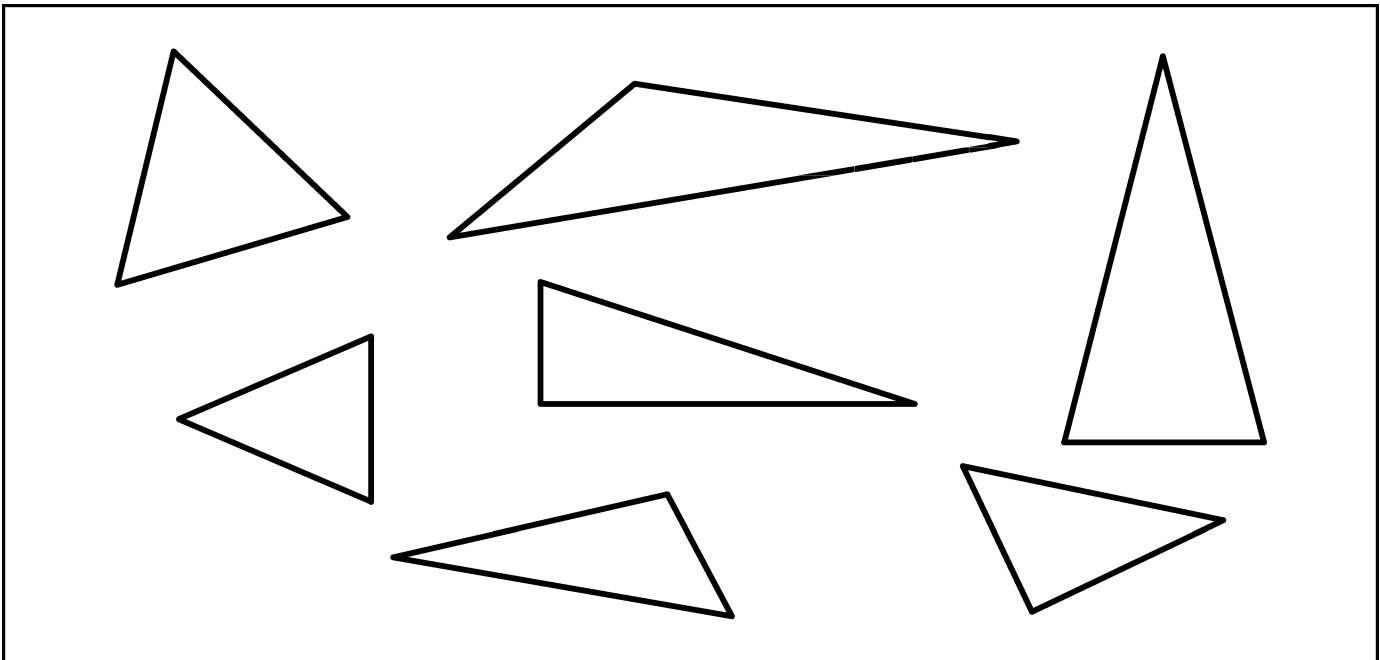


All 3 sides are the same length.

Look at the triangles in the box below. Color:

- the isosceles triangles purple.
- the scalene triangles yellow.
- the equilateral triangles blue.

Hint If you are not sure whether the side lengths are equal or not, use your ruler to help. Measure to the nearest quarter inch.



Set C4 ★ Independent Worksheet 4



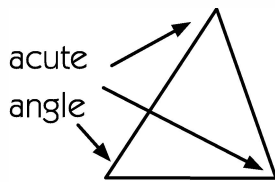
INDEPENDENT WORKSHEET

More Geoboard Triangles

Remember that you can classify and describe triangles in two different ways:

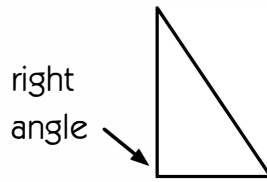
- by the size of their angles

Acute Triangle



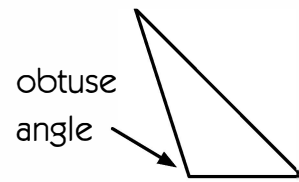
All 3 angles are acute.

Right Triangle



One of the angles is a right angle.

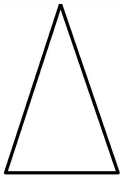
Obtuse Triangle



One of the angles is obtuse.

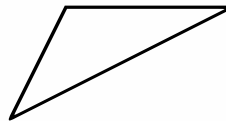
- by the length of their sides

Isosceles Triangle



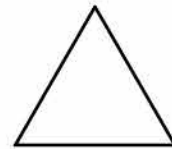
Two sides are the same length.

Scalene Triangle



Each side is a different length.

Equilateral Triangle

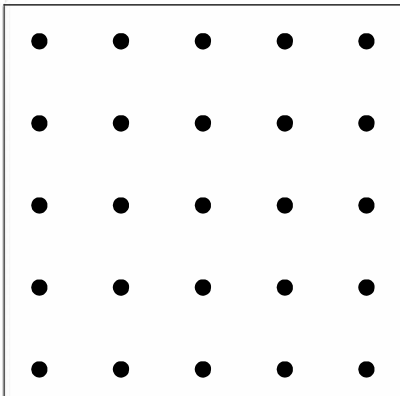


All 3 sides are the same length.

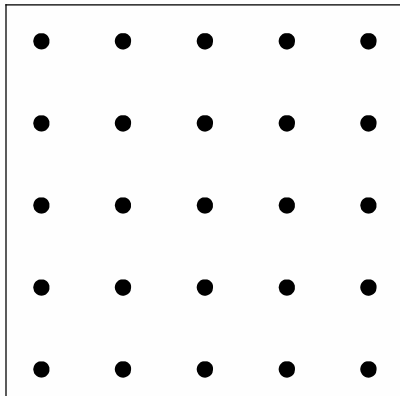
1 Follow the instructions above each geoboard to draw some different triangles

Hint Build your triangles on a geoboard first. Then copy them onto the paper.

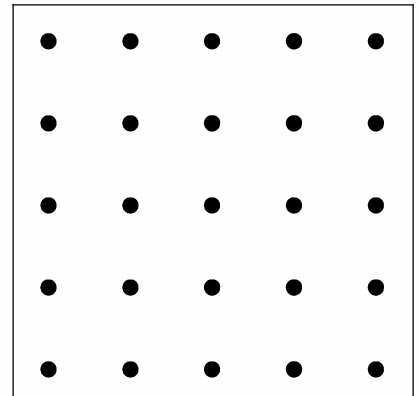
a A Right Triangle



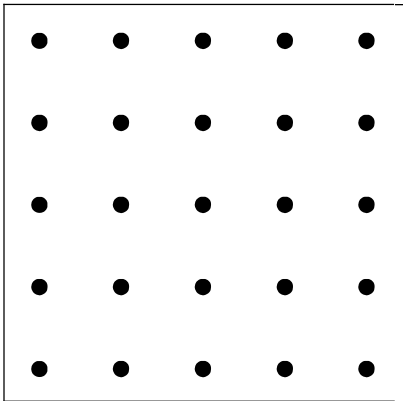
b An Isosceles Triangle



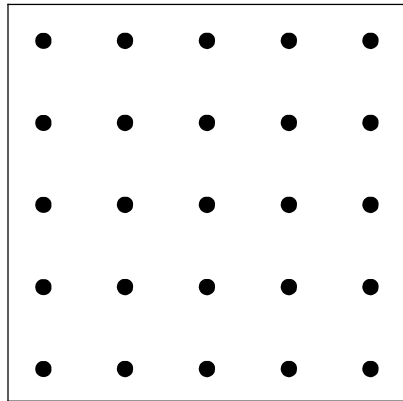
c An Acute Triangle



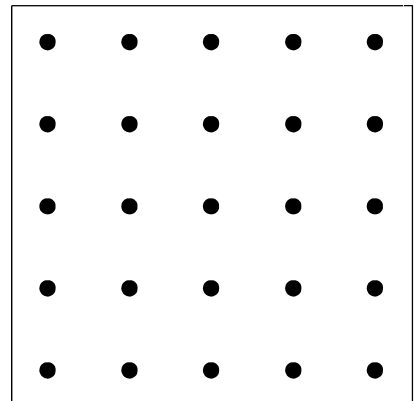
d An Obtuse Triangle



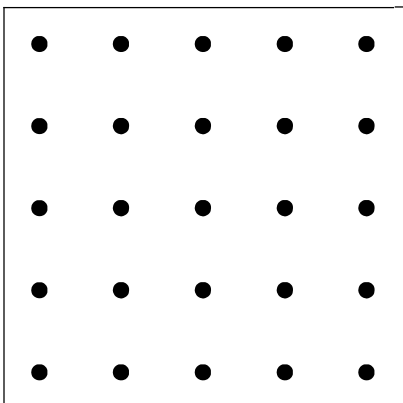
e A Scalene Triangle



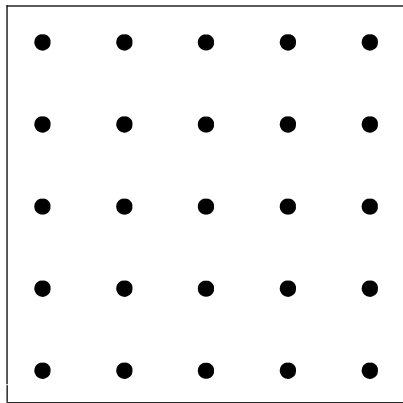
f A Right Triangle that is also Isosceles



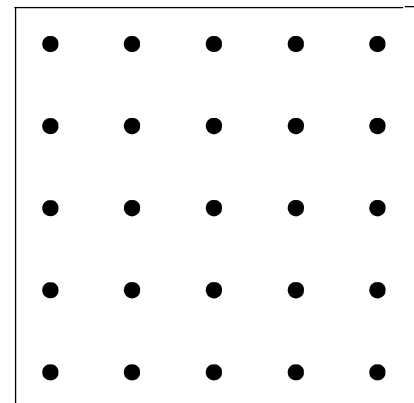
g A Right Triangle that is also Scalene



h An Acute Triangle that is also Scalene



i A Scalene Triangle that is also Obtuse



CHALLENGE

2 Dana says it is impossible to draw a right triangle that is also acute. Do you agree with her? Why or why not? Use the geoboards below to test your ideas.

