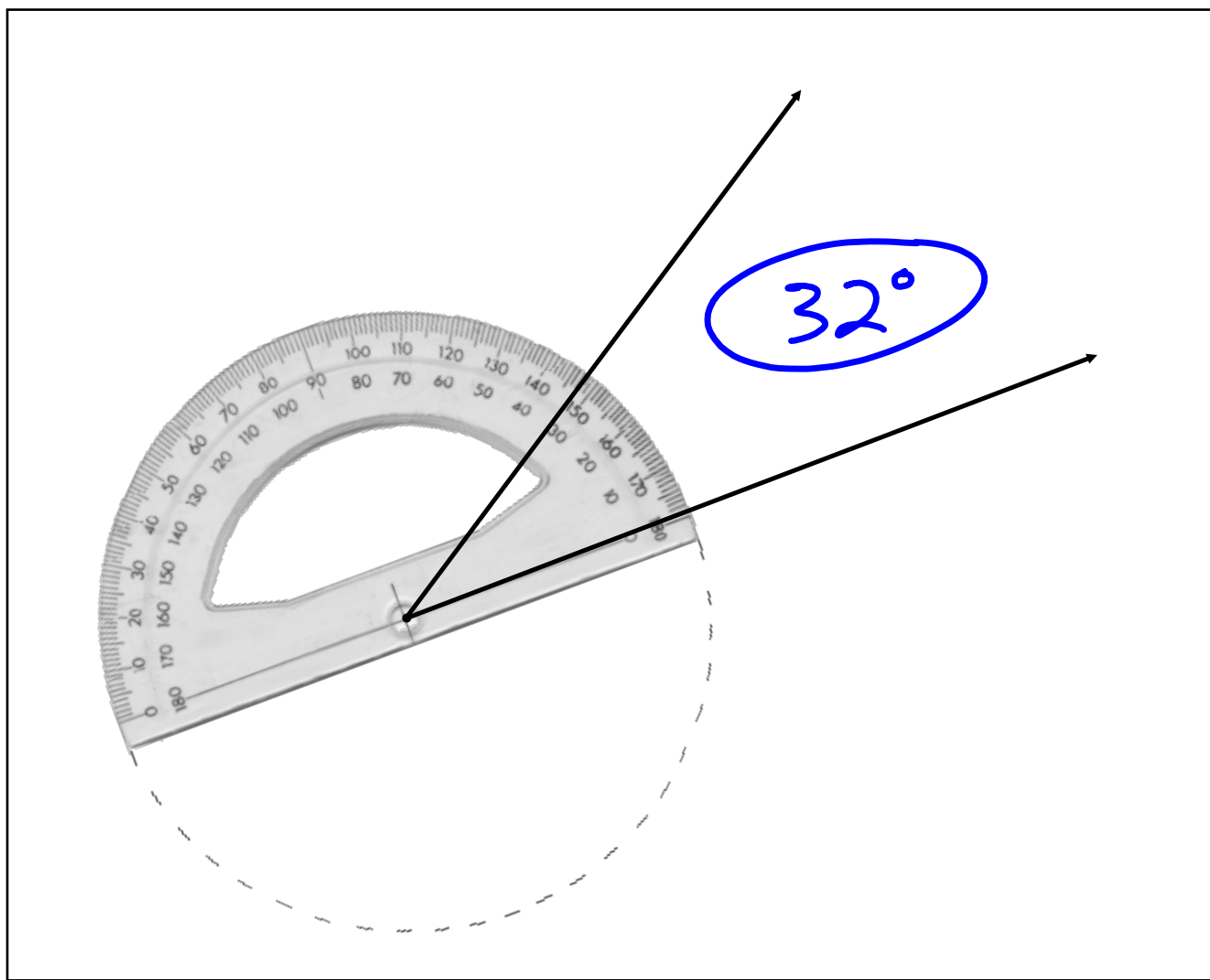
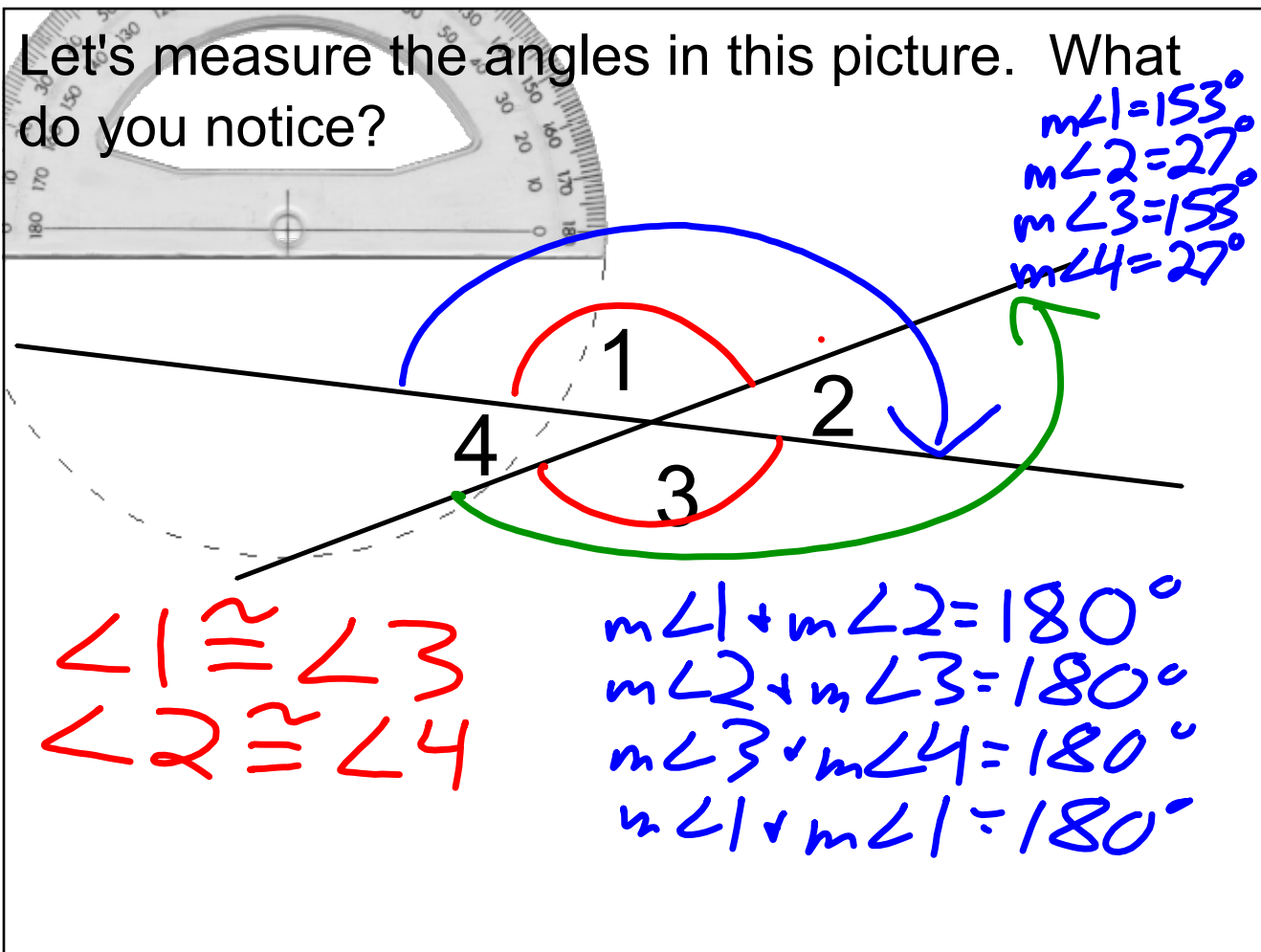


HW: 8-4 MathXL Additional Practice
(on Google Classroom)



Let's measure the angles in this picture. What do you notice?



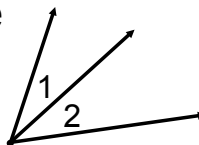
$m\angle 1 = 153^\circ$
 $m\angle 2 = 27^\circ$
 $m\angle 3 = 153^\circ$
 $m\angle 4 = 27^\circ$

$\angle 1 \cong \angle 3$
 $\angle 2 \cong \angle 4$

$m\angle 1 + m\angle 2 = 180^\circ$
 $m\angle 2 + m\angle 3 = 180^\circ$
 $m\angle 3 + m\angle 4 = 180^\circ$
 $m\angle 1 + m\angle 4 = 180^\circ$

Adjacent angles-

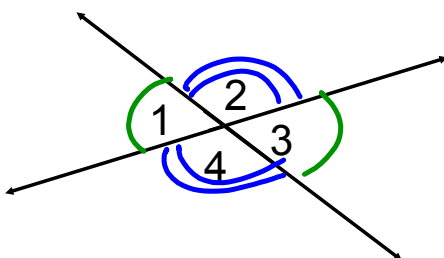
common vertex, common side



Vertical angles-

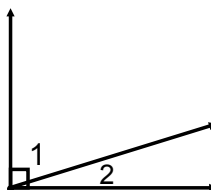
angles formed by two intersecting lines that are opposite one another

- vertical angles are congruent ←
- angles 1 and 3 are vertical angles
- angles 2 and 4 are vertical angles



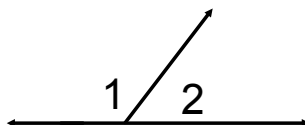
Complementary angles-

sum is 90 degrees



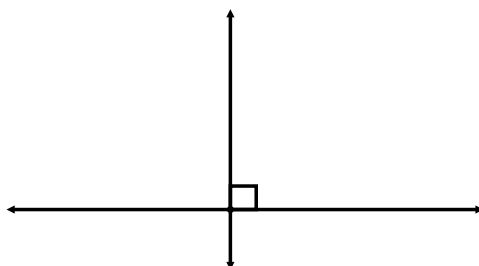
Supplementary angles-

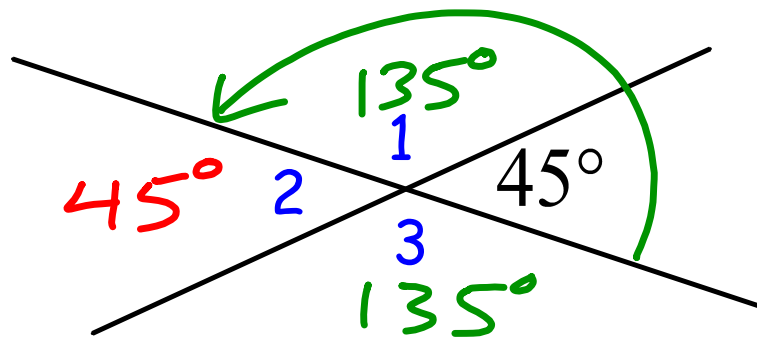
sum is 180 degrees



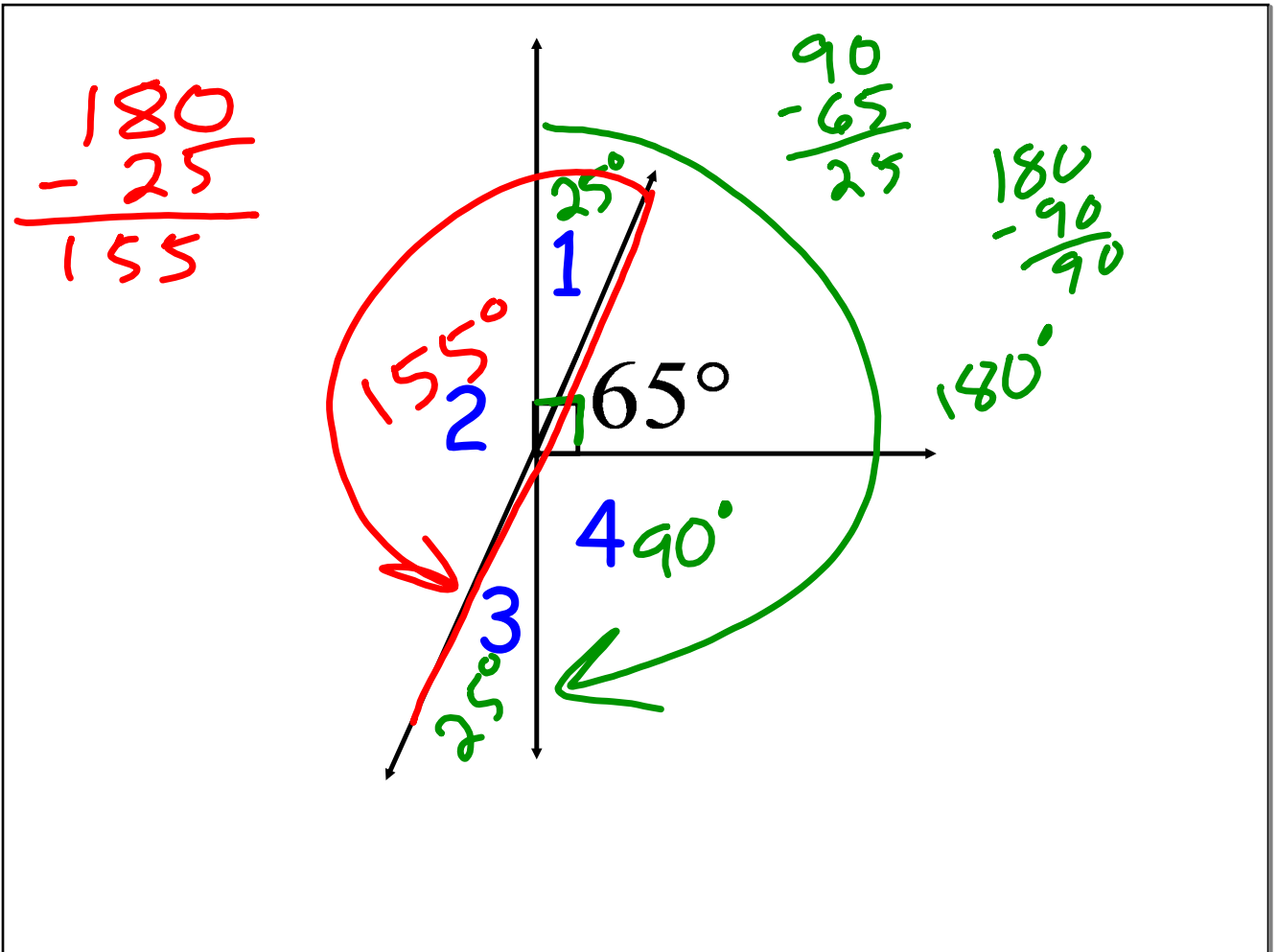
Perpendicular lines-

two lines that intersect to form a right angle





$$\begin{array}{r} 180 \\ - 45 \\ \hline 135 \end{array}$$



Handwritten mathematical work and a geometric diagram.

Green subtraction:

$$\begin{array}{r} 180 \\ - 14 \\ \hline 166 \end{array}$$

Red subtraction:

$$\begin{array}{r} 180 \\ - 86 \\ \hline 94 \end{array}$$

Red addition:

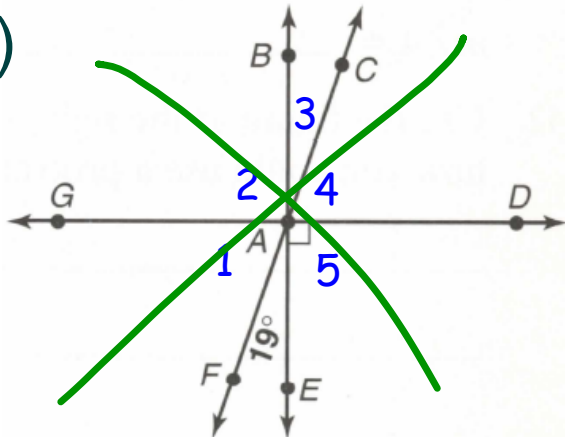
$$\begin{array}{r} 72 \\ + 14 \\ \hline 86 \end{array}$$

Diagram: A geometric diagram showing three lines intersecting at a central point. The top line is horizontal. Two other lines intersect it. The angles are labeled as follows:

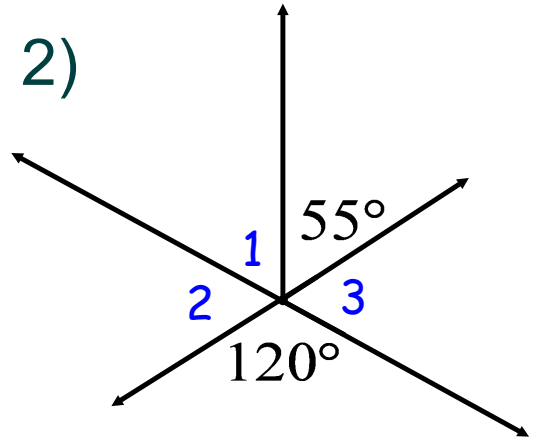
- Top-left angle: 166° (green, labeled 1)
- Top-right angle: 14° (black)
- Bottom-left angle: 14° (green, labeled 2)
- Bottom-middle angle: 94° (red, labeled 3)
- Bottom-right angle: 72° (black)

A red oval highlights the bottom-left, bottom-middle, and bottom-right angles. A red arrow points to the bottom-left angle.

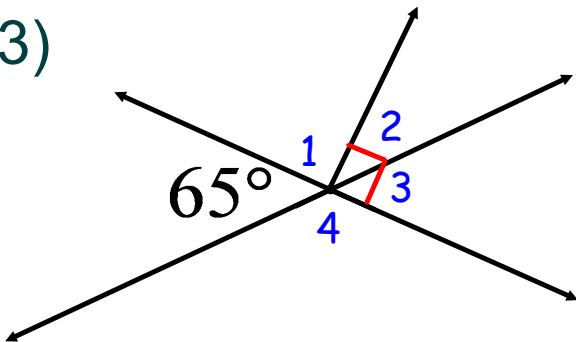
1)



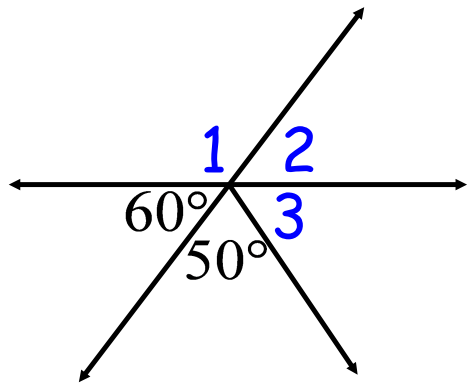
2)



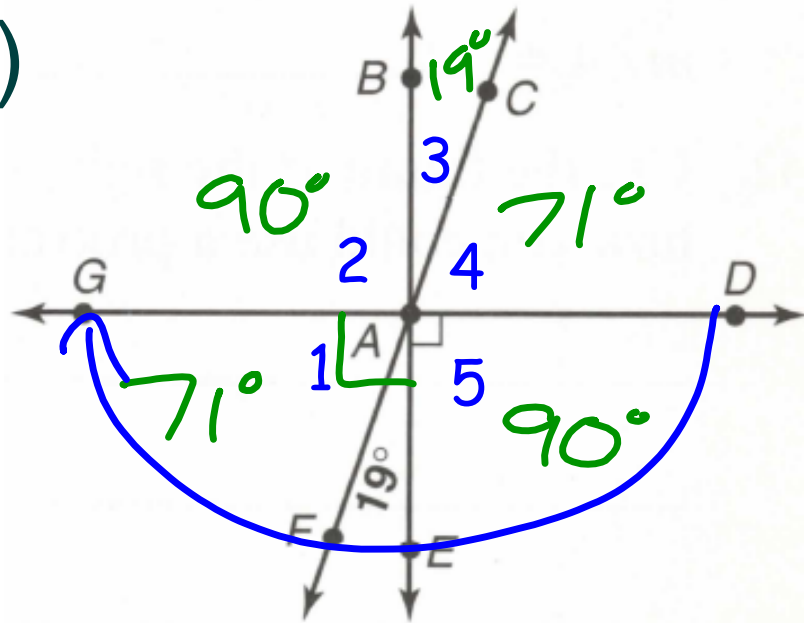
3)



4)

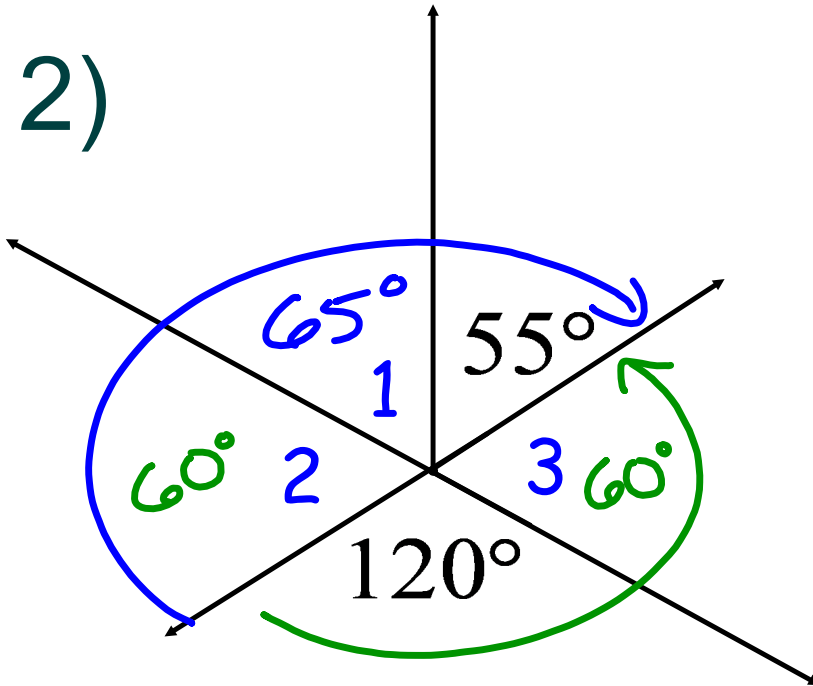


1)

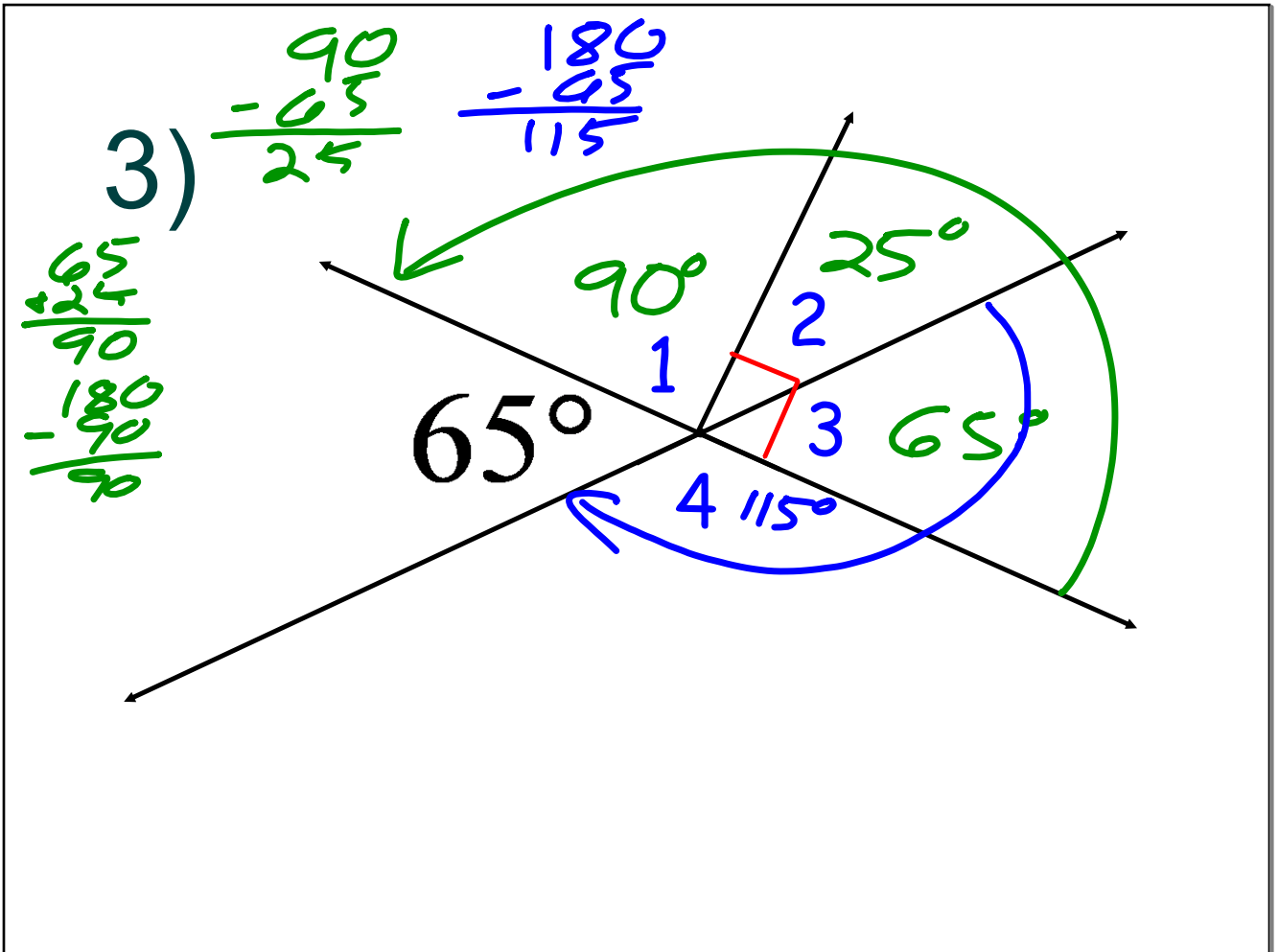


2)

$$\begin{array}{r} 60 \\ + 55 \\ \hline 115 \\ - 115 \\ \hline 0 \end{array}$$
$$\begin{array}{r} 180 \\ - 115 \\ \hline 65 \end{array}$$



$$\begin{array}{r} 180 \\ - 120 \\ \hline 60 \end{array}$$



4)
$$\begin{array}{r} +60 \\ +50 \\ \hline 110 \\ -180 \\ \hline -110 \\ \hline 70 \end{array}$$

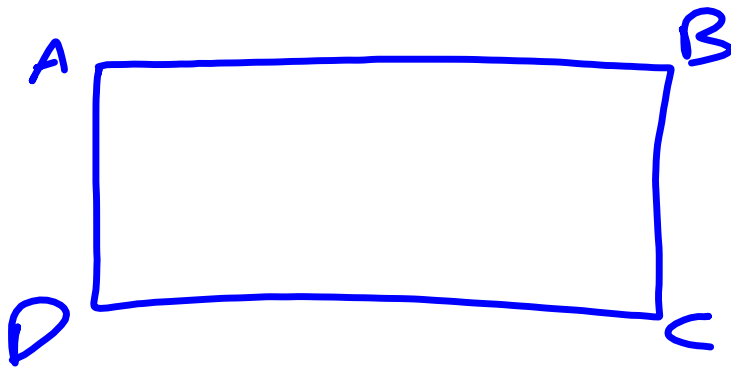
$$\begin{array}{r} 180 \\ -60 \\ \hline 120 \end{array}$$

The diagram illustrates the relationship between angles formed by intersecting lines. A horizontal yellow line is intersected by a diagonal yellow line and a black line. The angles are labeled as follows:

- Top-left angle: 120° (red)
- Top-right angle: 60° (green)
- Bottom-left angle: 60° (green)
- Bottom-center angle: 50° (black)
- Bottom-right angle: 70° (blue)

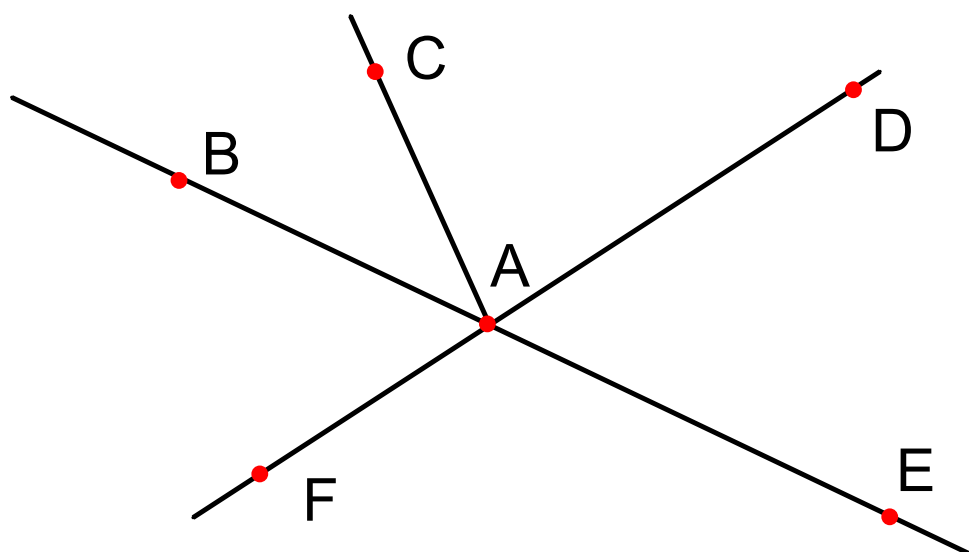
Regions are numbered 1, 2, and 3:

- Region 1: The area above the horizontal line and to the left of the diagonal yellow line.
- Region 2: The area above the horizontal line and to the right of the diagonal yellow line.
- Region 3: The area below the horizontal line and to the right of the diagonal yellow line.



$\angle A =$

Naming Angles



Solve for x.

$$5x + 75 = 180$$

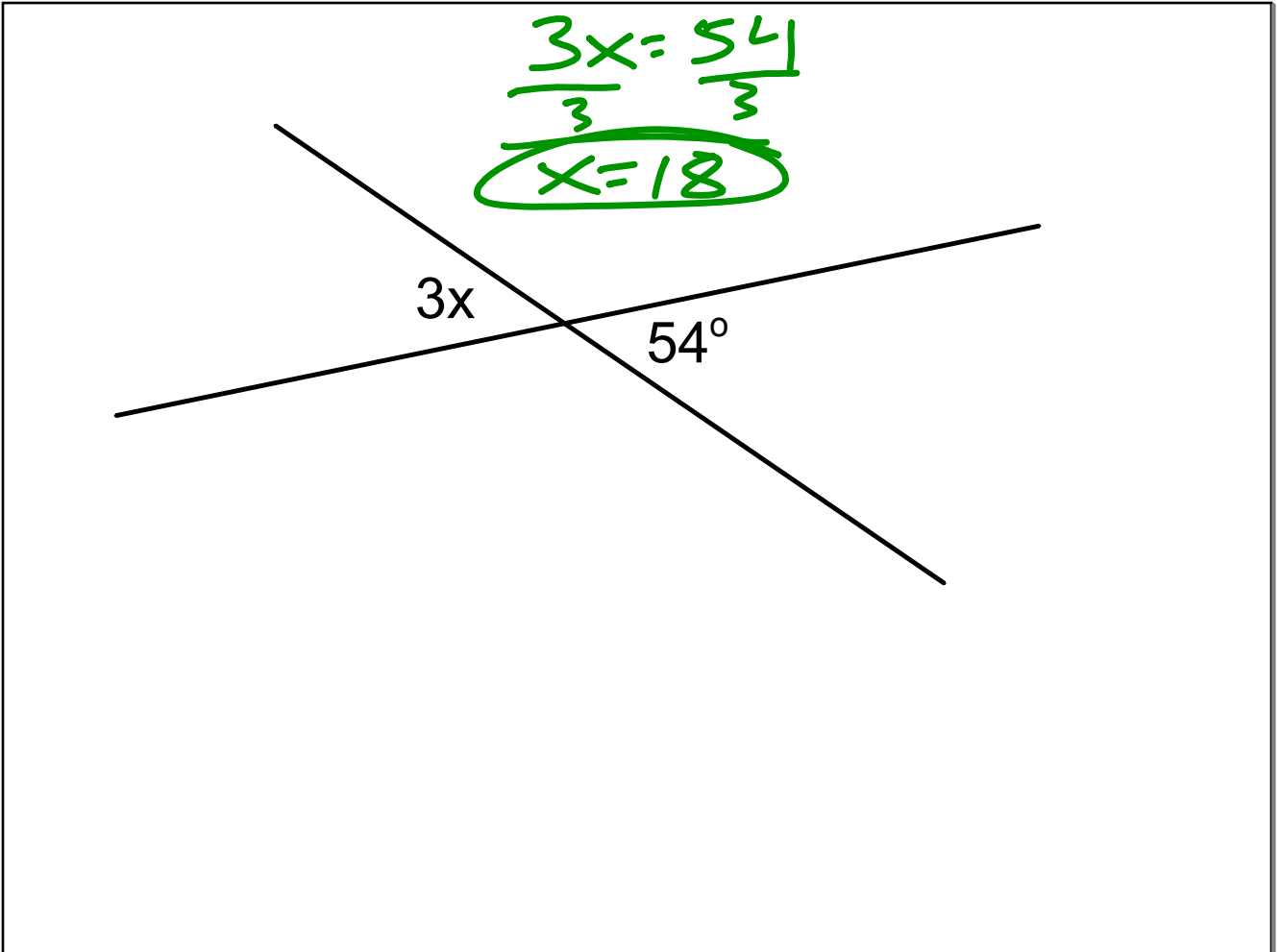
$$\begin{array}{r} -75 \\ -75 \end{array}$$

$$\frac{5x}{5} = \frac{105}{5}$$

$$x = 21$$

5x

75°



Lesson Quiz

Google Classroom

