

Grade 4 · Measuring and Adding Angles · Worksheet

Common Core 4.MD.C.5, 4.MD.C.6, 4.MD.C.7 · mathovore.fr

Name: _____ Date: ____/____/____ Score: _____

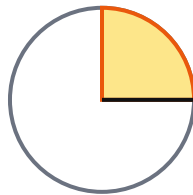
These 22 problems practice standards 4.MD.C.5, 4.MD.C.6, and 4.MD.C.7: angles as turns of a circle, one-degree angles, measuring and drawing angles with a protractor, and adding and subtracting angle measures.

The set begins with turns and degrees, moves to reading and drawing angles, and ends with unknown-angle equations and multi-step word problems.

Grade 4 Common Core: 4.MD.C.5 · 4.MD.C.6 · 4.MD.C.7

Problem 1: Quarter turn

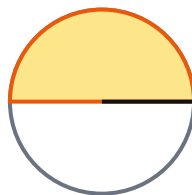
Find the number of degrees in a quarter turn of a circle.



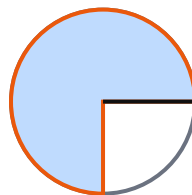
1/4 turn
A quarter turn.

Problem 2: Half turn and three-quarter turn

Find the number of degrees in (a) a half turn and (b) a three-quarter turn.



1/2 turn



3/4 turn

Two turns of a circle.

Problem 3: Fraction of a circle

Find the measure of an angle that turns through $\frac{1}{8}$ of a circle.

Problem 4: Counting one-degree angles

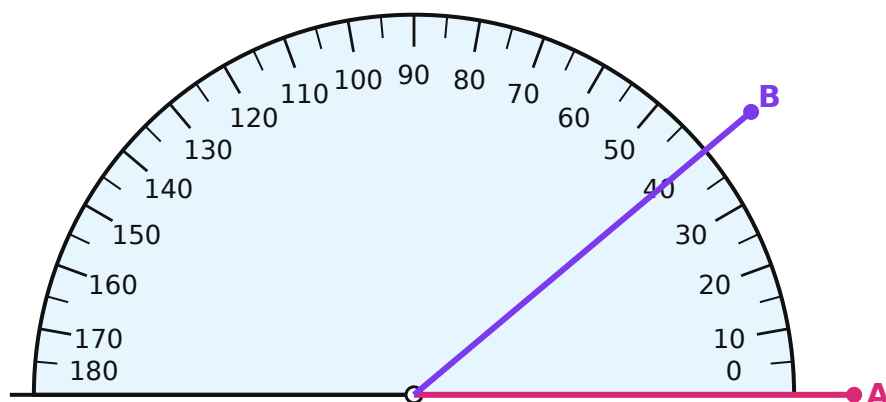
Write the measure of an angle that opens through 75 one-degree angles.

Problem 5: Comparing two angles

Angle A is made of 40 one-degree angles. Angle B is made of 25 one-degree angles. Tell which angle is greater and by how many degrees.

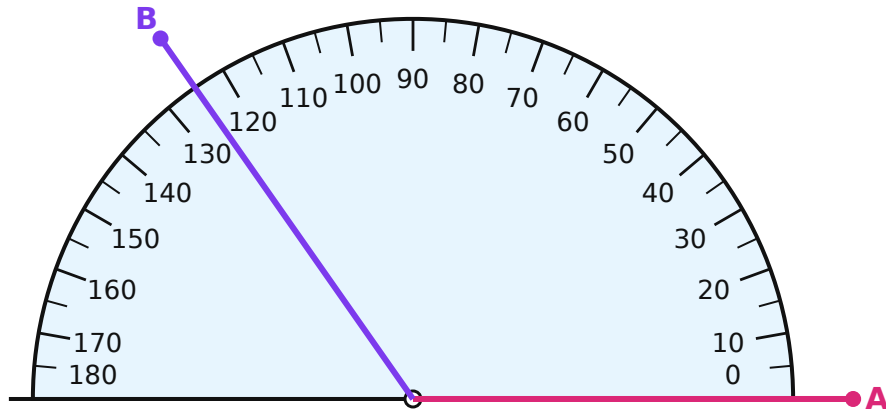
Problem 6: Reading a protractor: small angle

Find the measure of the angle formed by ray A and ray B.



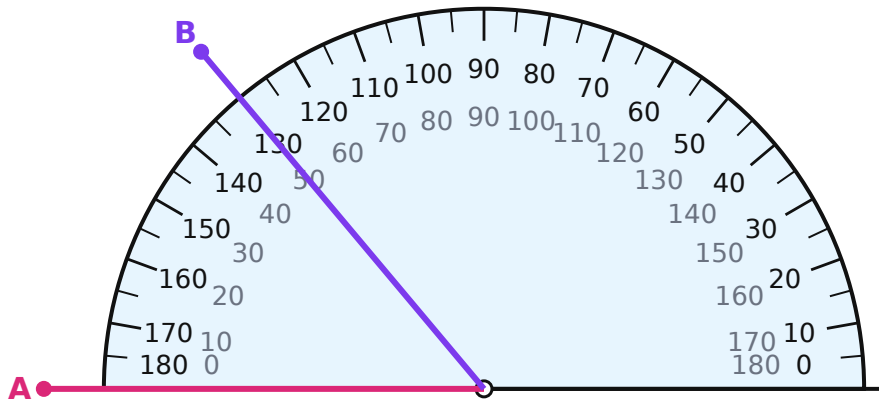
Problem 7: Reading a protractor: wide angle

Find the measure of the angle formed by ray A and ray B.



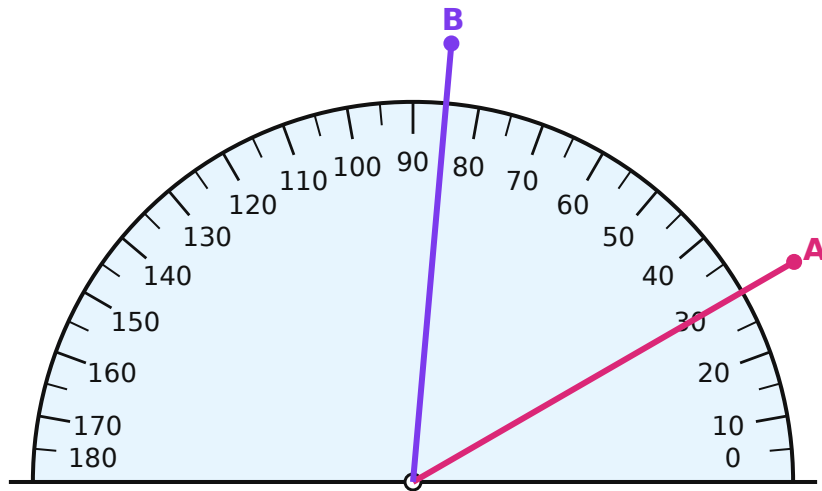
Problem 8: Reading from the left

Ray A lies on the left end of the baseline. Find the measure of the angle formed by ray A and ray B.



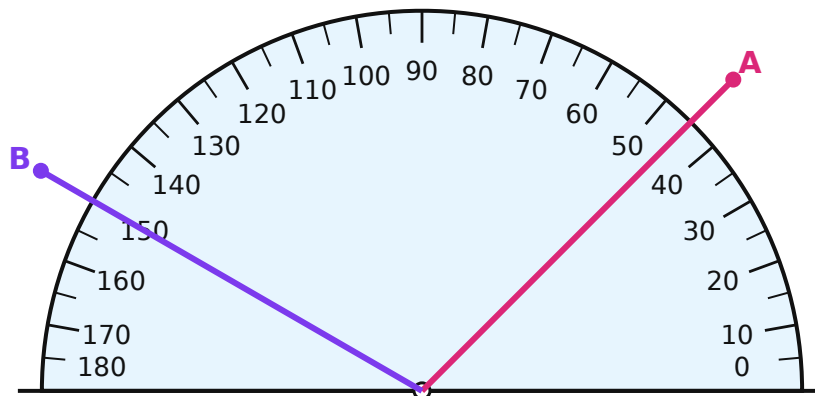
Problem 9: Rays not on zero

Find the measure of the angle formed by ray A and ray B.



Problem 10: Rays not on zero: wide angle

Find the measure of the angle formed by ray A and ray B.



Problem 11: Draw a 50 degree angle

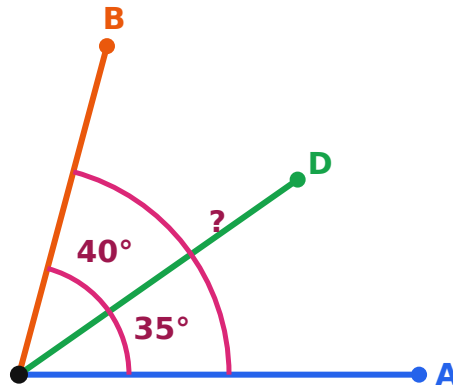
Draw ray OA. Then use a protractor to draw an angle of 50° with vertex O and ray OA as one side. Describe the steps.

Problem 12: Draw a 135 degree angle

Draw an angle of 135° . Name the vertex O and tell which scale you used.

Problem 13: Adding two angles

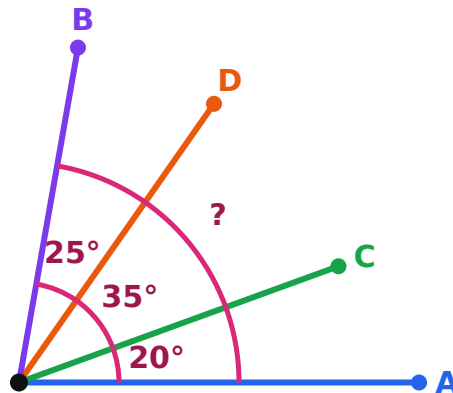
Find the measure of angle AOB.



Find the whole angle.

Problem 14: Adding three angles

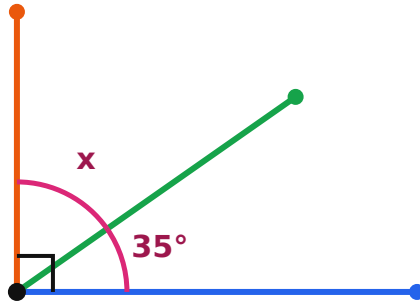
Find the measure of angle AOB.



Three parts.

Problem 15: Unknown angle in a square corner

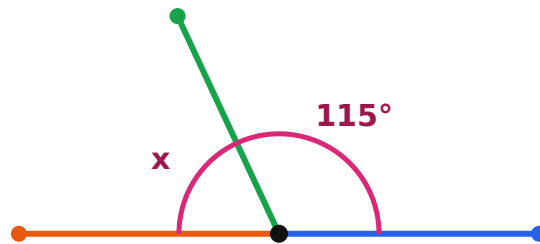
The square corner measures 90° . Find the measure of the unknown angle x.



The square corner marks a 90° angle.

Problem 16: Unknown angle on a straight line

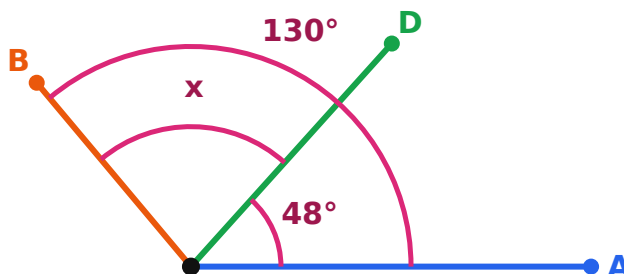
The two angles together make a straight angle of 180° . Find the measure of x .



A straight line is a 180° angle.

Problem 17: Equation with a letter

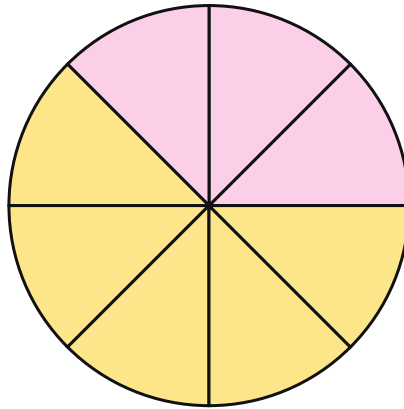
Write an equation with the letter x for the unknown angle. Then solve it.



The whole angle is 130° .

Problem 18: Pizza slices

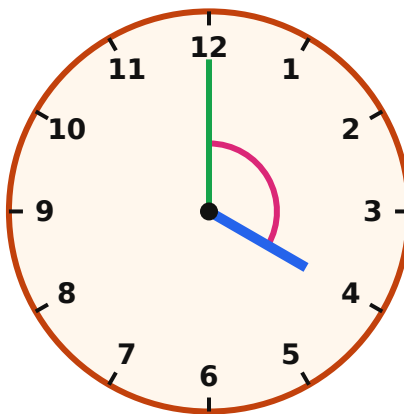
A round pizza is cut into 8 equal slices that meet at the center. Find the measure of the angle at the center of one slice. Then find the measure of the angle for the 3 slices Maya ate.



Pizza cut into 8 equal slices. Maya ate the 3 pink slices.

Problem 19: Angle on a clock

Find the measure of the angle formed by the hands of the clock at 4:00. The 12 numbers are equally spaced.



The hour hand points at 4 and the minute hand points at 12.

Problem 20: Swinging gate

Sofia's gate swings open 65° . Liam pushes it 25° farther. Then the wind swings it back 30° . Find how many degrees the gate is open now.

Problem 21: Spinning in place

Jamal spins in place. He turns 90° , then 45° more, then 135° more. Find the total number of degrees he turned and the fraction of a full turn.

Problem 22: Find the mistake

Ava read where ray B crosses the scale and wrote 70° for the measure of the angle formed by ray A and ray B. Explain her mistake and find the correct measure.

