

MY Homework

Lesson 7

Solve Problems with Angles

Homework Helper



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Find the measure of the unknown angle.
The combined angle measure is 140° .

Use an equation.

You know the total measure is 140° . One angle is 25° .

Let d represent the unknown angle measure.

$$25 + d = 140$$

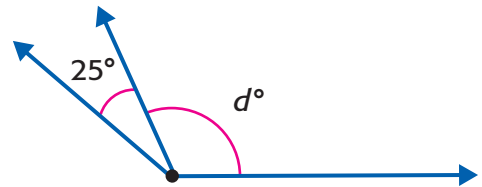
Since $25 + d = 140$, you know that $140 - 25 = d$.

Addition and subtraction are inverse, or opposite operations.

$$d = 140 - 25$$

$$d = 115$$

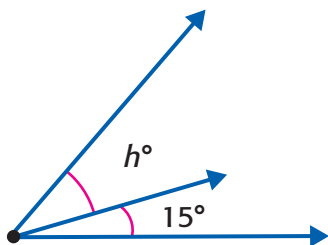
So, the measure of the unknown angle is 115° .



Practice

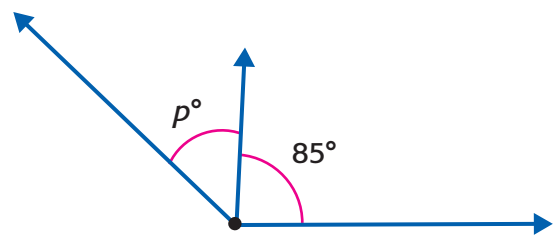
Algebra Find each unknown.

1. The combined angle measure is 50° .



$$h = \underline{\hspace{2cm}}$$

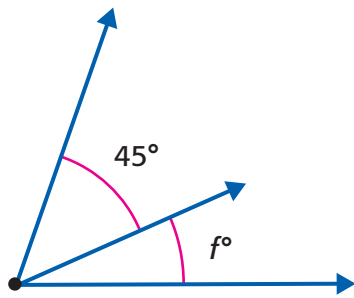
2. The combined angle measure is 135° .



$$p = \underline{\hspace{2cm}}$$

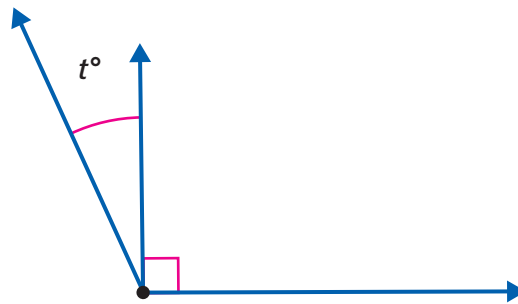
Algebra Find each unknown.

3. The combined angle measure is 70° .



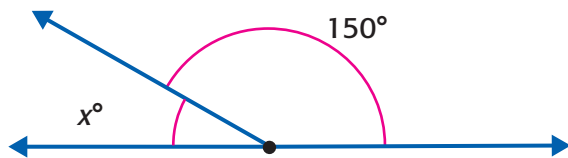
$f =$ _____

4. The combined angle measure is 115° .



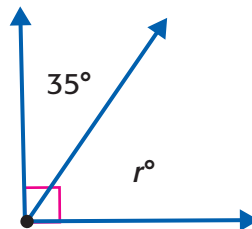
$t =$ _____

5. The combined angle measure is 180° .



$x =$ _____

6. Find the value of r .



$r =$ _____



Problem Solving

7. **Mathematical PRACTICE** **1** **Make a Plan** A photographer is taking the fourth-grade class picture. She stands on a ladder to get a better angle. From the top step of the ladder, she will shoot at a 45° angle. There are 3 evenly spaced steps. From what angle would the photographer shoot on the bottom step?

Test Practice

8. The combined angle measure is 120° . What is the value of n ?

- (A) 45
- (B) 40
- (C) 35
- (D) 30

