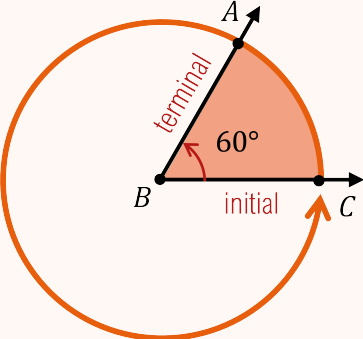
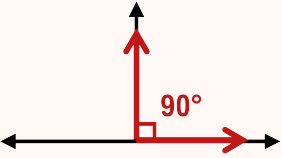
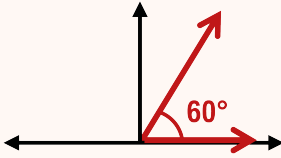
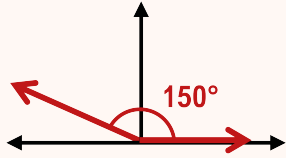
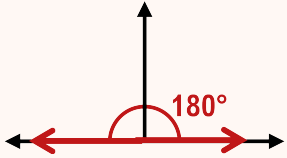


TOPIC: INTRODUCTION TO ANGLES

Measuring and Classifying Angles

◆ Recall: An angle is formed by 2 rays (sides) which share an endpoint (vertex).

► The **measure** of an angle is the amount of _____ between its 2 rays, using units of degrees ().

New			
Angle Measure			
		$\angle ABC = 60^\circ$ 1 full rotation = _____° $60^\circ = \frac{1}{\quad}$ of a circle	
Types of Angles			
Right (90°) 	Acute (90°) 	Obtuse (90°, 180°) 	Straight (°) 

TOPIC: INTRODUCTION TO ANGLES

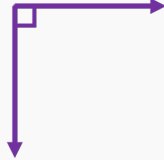
PRACTICE

Classify each angle as acute, right, obtuse, straight, or none of the above.

(A)



(B)



(C)

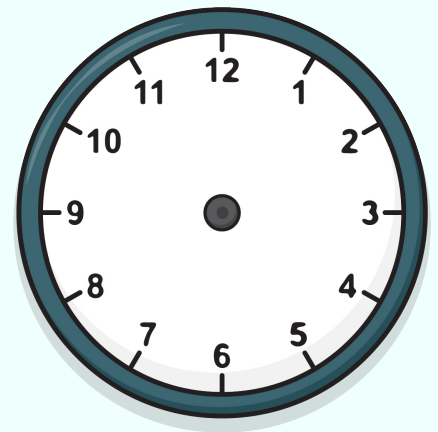


EXAMPLE

The hour hand of a clock moves from 1:00 to 9:00.

(A) What fraction of a circle did the hand move through?

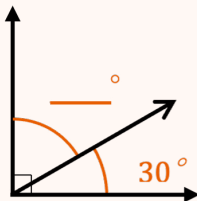
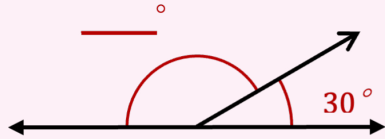
(B) What measure of angle did the hand move through?



TOPIC: INTRODUCTION TO ANGLES

Introduction to Complementary and Supplementary Angles

♦ **Complementary** angles are two angles that add to ____, while **Supplementary** angles add to ____.

Complementary Angles	Supplementary Angles
	

EXAMPLE

Find the complement & the supplement of the given angle, if possible.

(A)

20°

Complement: ____

Supplement: ____

(B)

100°

Complement: ____

Supplement: ____

Note: Complementary & supplementary angles are always assumed to be *positive*.

PRACTICE

Find the complement & supplement of a 45° angle.

Complement: ____

Supplement: ____

TOPIC: INTRODUCTION TO ANGLES

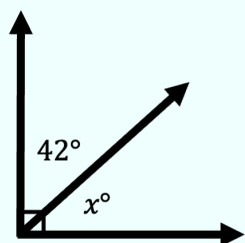
Solving Problems with Complementary and Supplementary Angles

◆ When angles are written in terms of variables, use complementary & supplementary angles to write an _____ and solve.

EXAMPLE

Find the measure of all unknown angles.

(A)



Recall

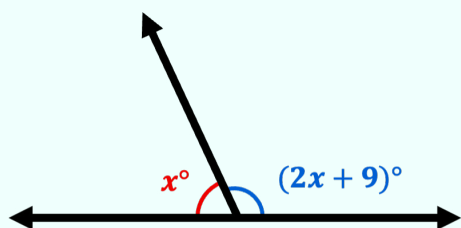
$$\theta_1 + \theta_2 = 90^\circ$$

(complementary)

$$\theta_1 + \theta_2 = 180^\circ$$

(supplementary)

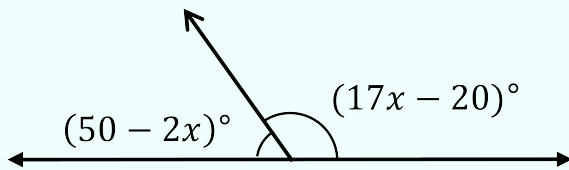
(B)



TOPIC: INTRODUCTION TO ANGLES

EXAMPLE

Solve for each angle below.



PRACTICE

The measure of an angle is 9° more than that of its supplement. Find the measure of each unknown angle. 💡 *Hint: let x be the measure of the supplement and sketch the angles*