Making Rotating Arms to Understand Angles

A. Choose the Correct Answer:

1. If the hands of a clock show 3:00, what type of angle do they form?

a) Acute Angle b) Right Angle

c) Obtuse Angle d) Straight Angle

2. An angle less than 90° is called a:

a) Right Angle b) Obtuse Angle

c) Acute Angle d) Reflex Angle

3. Which instrument is used to measure angles?

a) Ruler b) Compass

c) Protractor d) Divider

4. A full rotation is equal to:

a) 90° b) 180°

c) 270° d) 360°

5. What is the measure of a straight angle?

a) 90° b) 120°

c) 180° d) 360°

B. Figure out the answers to these questions:

1. Draw an angle using a protractor that measures 120° and classify it as acute, obtuse, or right angle.
2. The minute hand of a clock moves from 12 to 3. How many degrees does it rotate?
3. If a fan blade rotates one-fourth of a full circle, how many degrees has it moved?

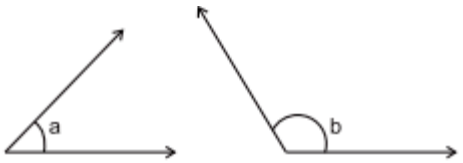
C. Write the Missing Terms to Complete the Sentences:

1. An angle greater than 90° but less than 180° is called an _____ angle.
2. The hands of a clock at 12:30 form a _____ angle.
3. A complete revolution of a rotating arm makes an angle of _____ degrees.
4. A right angle is exactly _____ degrees.
5. When two rays meet at a common point, they form an _____.

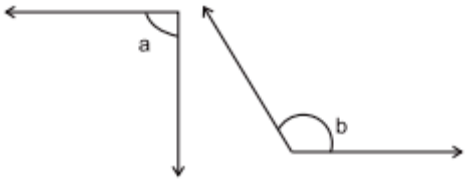
D. Challenge yourself with these questions:

1. Look around your house and find three objects that form angles. Name them and estimate their measures.
2. If a car's steering wheel is turned from a straight position to 45°, what type of angle is formed?
3. A boy rotates his arm twice in a complete circle. How many degrees has his arm moved in total?
4. If a windmill blade rotates 135° and then another 225°, what is the total rotation?
5. The hands of a clock form an angle of 90° at 9:00. At what other time will they form the same angle?
6. Two angles measure 65° and 115°. Are they complementary or supplementary?
7. How many times in a day does the hour and minute hand form a straight angle?

E. In the following pairs of angles, say which is greater, without measuring the angles.

i. 

ii. 

iii. 

iv.