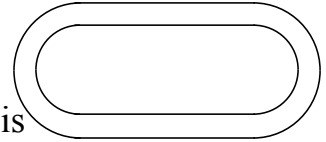


# Mathematics Assessment Program

## Middle School Mathematics

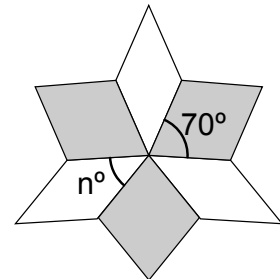
### Short Tasks: Geometry

1. This is a diagram of a running track. The track is made up of straights and semicircles. The radius of the outside semicircle is 35 meters. The length of the outer perimeter is 400 meters. Find the length of the straights.



2. A picture is copied onto a sheet of paper 8.5 inches by 10 inches. A 1.5 inch margin is left all around. What area in square inches does the picture cover?
3. Find the number of degrees that the hour hand of a clock moves through between noon and 2.30 in the afternoon of the same day.
4. If one leg of a right triangle is 8 inches long, and the other leg is 12 inches long, how many inches long is the triangle's hypotenuse?
5. A cubical block of metal weighs 6 pounds. How much will another cube of the same metal weigh if its sides are twice as long?
6. A triangle has a perimeter 13. The two shorter sides have integer lengths equal to  $x$  and  $x + 1$ . What could be the lengths of the three sides of the triangle?

7. Three identical white shapes and three identical grey shapes are fitted together to make this pattern. How big is the angle marked  $n^\circ$ ?  
(Drawing not to scale)



8. On this diagram label another angle whose measure is  $80^\circ$ .

