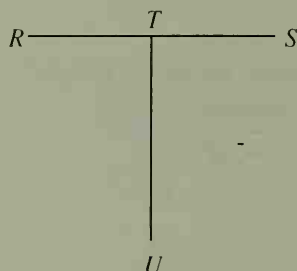


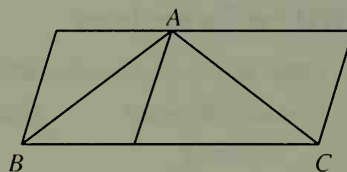
The spoon in the photograph appears to be broken because light rays bend as they go from air to water. As in the photograph, your eyes may mislead you in some of the exercises that follow, but you are asked to make estimates. You may want to check your estimates by measuring.



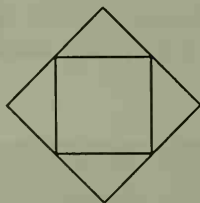
5. Which is greater, the distance from  $R$  to  $S$  or the distance from  $T$  to  $U$ ?



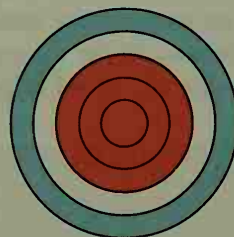
6. Which is greater, the distance from  $A$  to  $B$  or the distance from  $A$  to  $C$ ?



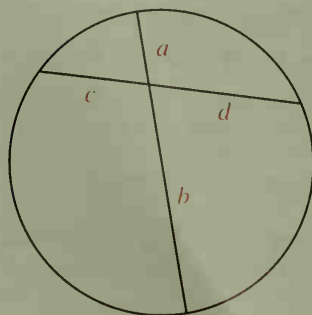
- B** 7. How does the area of the outer square compare with the area of the inner square?



8. Compare the areas of the red and blue regions. (Area of circle =  $\pi r^2$ .)



9. In the diagram  $a$ ,  $b$ ,  $c$ , and  $d$  are lengths. Which is greater, the product  $ab$  or the product  $cd$ ?



10. A path between opposite vertices of the square is made up of hundreds of horizontal and vertical segments. (The diagram shows a simplified version.) What is the best approximation to the length of the path—24, 34, 44, or more than 44?

