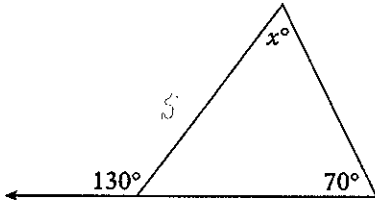


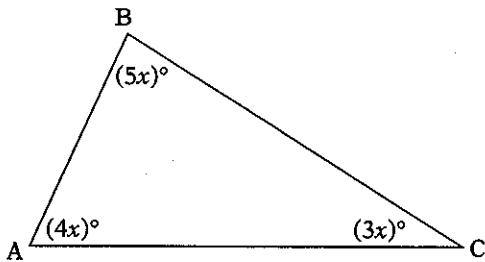
PRACTICE SAT QUESTIONS

1. What is the value of x ?



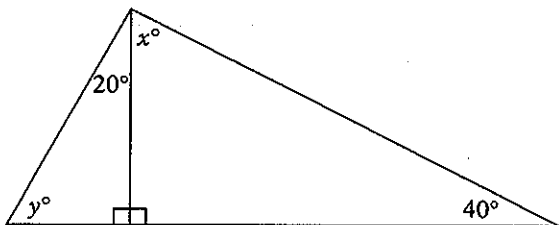
- A. 60
- B. 70
- C. 80
- D. 90
- E. 100

2. $m\angle ABC =$



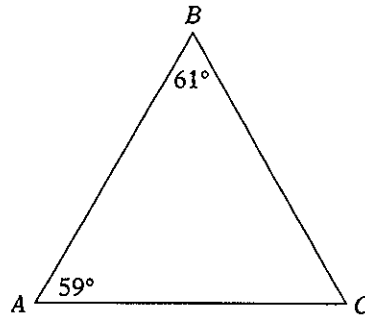
- A. 35°
- B. 45°
- C. 55°
- D. 65°
- E. 75°

3. $y - x =$



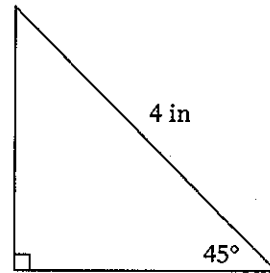
- A. 60
- B. 50
- C. 40
- D. 30
- E. 20

4. Which of the following statements is correct?



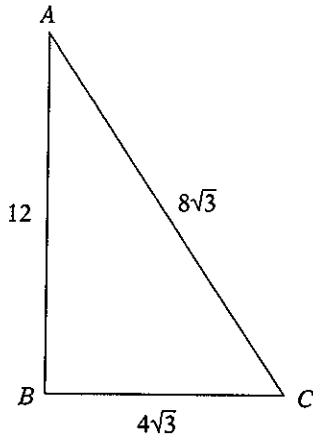
- A. $AB < BC < AC$
- B. $BC < AB < AC$
- C. $AB < AC < BC$
- D. $AC < BC < AB$
- E. $BC < AC < AB$

5. What is the area of the triangle below?

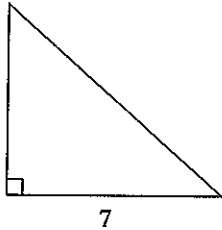


- A. 4 in^2
- B. 5 in^2
- C. 6 in^2
- D. 7 in^2
- E. 8 in^2

6. $m\angle BAC = x^\circ$. What is the value of x ?



7. The area of the triangle below is 56 cm^2 . What is the height of the triangle?



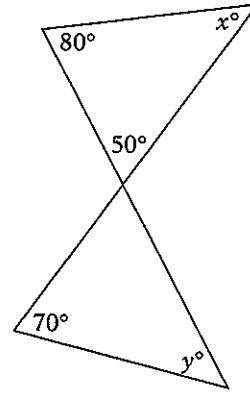
8. Which of the following could be the lengths of the sides of a triangle?

- I. 3,3,6
 - II. 3,4,8
 - III. 4,5,8
- A. I
 - B. II
 - C. III
 - D. I and II
 - E. II and III

9. If the angles of a triangle have a ratio of $1 : 2 : 3$ which of the following statements are true?

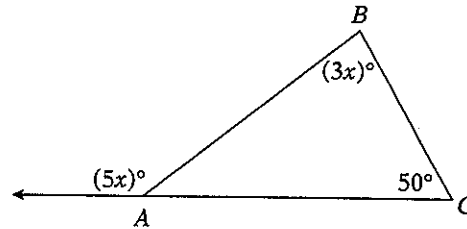
- I. The triangle is a right triangle.
 - II. The ratio of the sides are $1 : \sqrt{3} : 2$.
 - III. The angle measures are $30^\circ, 60^\circ, 90^\circ$.
- A. I
 - B. II
 - C. I and II
 - D. II and III
 - E. I, II, and III

10. $y - x =$



- A. 80
- B. 70
- C. 30
- D. 20
- E. 10

11. $m\angle CBA =$

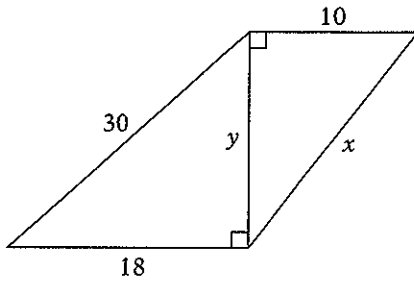


- A. 125
- B. 105
- C. 75
- D. 50
- E. 25

12. What is the perimeter of an equilateral triangle with a height of 6 feet?

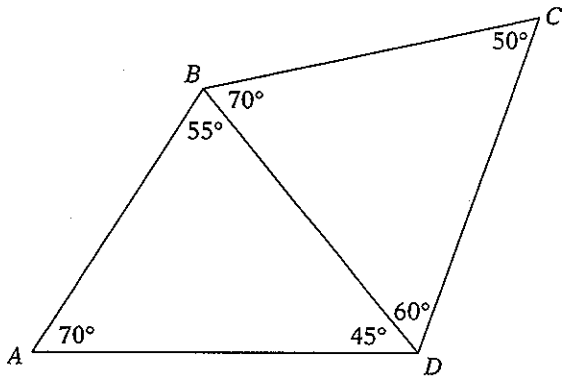
- A. $2\sqrt{3}$
- B. $4\sqrt{3}$
- C. $6\sqrt{3}$
- D. $10\sqrt{3}$
- E. $12\sqrt{3}$

13. $x + y =$



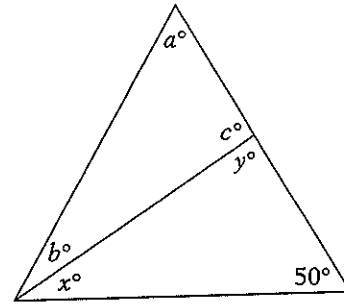
14. Two sides of a triangle are 7 and 16. Which of the following is not the length of the third side?
- A. 22
 - B. 17
 - C. 12
 - D. 10
 - E. 9

15. Which of the following is the longest side?



- A. \overline{BD}
- B. \overline{BC}
- C. \overline{AB}
- D. \overline{DC}
- E. \overline{AD}

16. $a + b + c + x + y =$

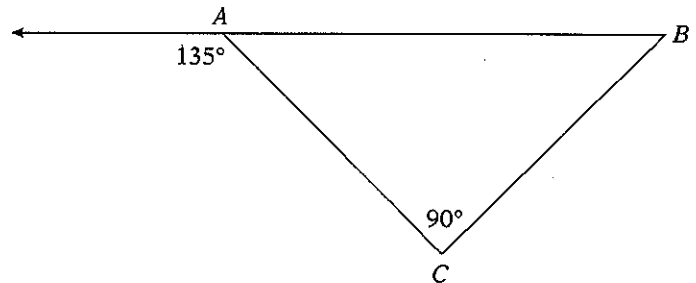


- A. 360
- B. 310
- C. 270
- D. 180
- E. 90

17. The area of an equilateral triangle is $36\sqrt{3}$ cm². What is the height of the triangle?

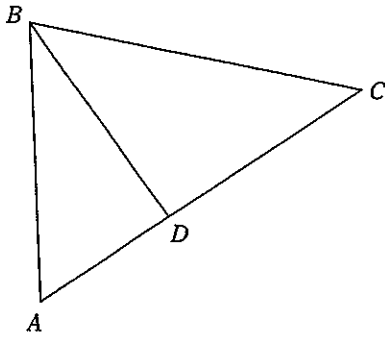
- A. 6 cm
- B. 12 cm
- C. $6\sqrt{3}$ cm
- D. $12\sqrt{3}$ cm
- E. 36 cm

18. In the figure below, if $BC = 5$ then $AB =$



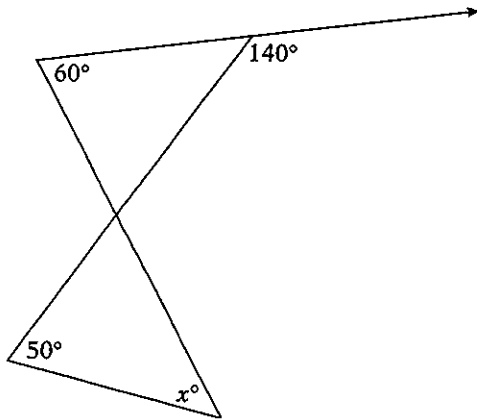
- A. 5
- B. 10
- C. 25
- D. $5\sqrt{2}$
- E. $10\sqrt{2}$

19. $m\angle BCA = 45^\circ$, $m\angle BAC = 60^\circ$
 $m\angle CBA = 75^\circ$, and $m\angle BDC = 90^\circ$. If $DC = 5$
 then $AD =$



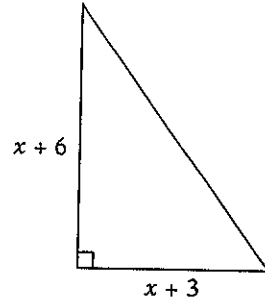
- A. $5\sqrt{2}$
- B. $5\sqrt{3}$
- C. $\frac{5\sqrt{3}}{3}$
- D. $\frac{5\sqrt{2}}{2}$
- E. $10\sqrt{2}$

20. What is the value of x ?

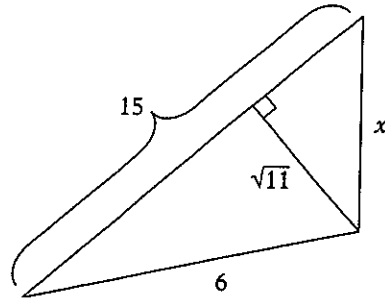


- A. 40
- B. 50
- C. 60
- D. 70
- E. 80

21. What is the length of the base of the right triangle below if the area is 20 in^2 ?

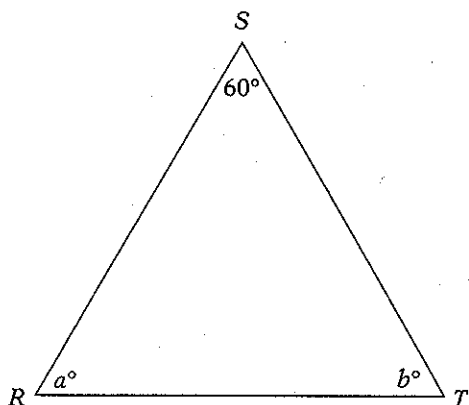


22. What is the value of x ?



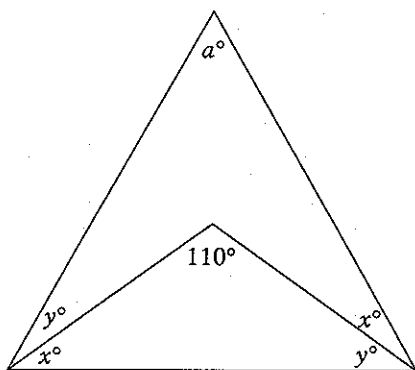
- A. $\sqrt{5}$
- B. $\sqrt{10}$
- C. $\sqrt{11}$
- D. $\sqrt{91}$
- E. $\sqrt{111}$

23. If $a > b$, which of the following statements is true?



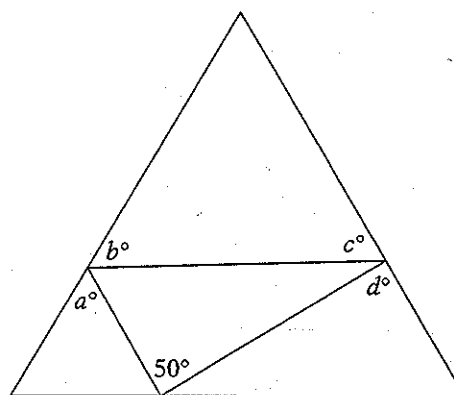
- I. $RT > RS$
 - II. $ST > RS$
 - III. $RT > ST$
- A. I
 - B. II
 - C. III
 - D. I and II
 - E. II and III

24. What is the value of a ?



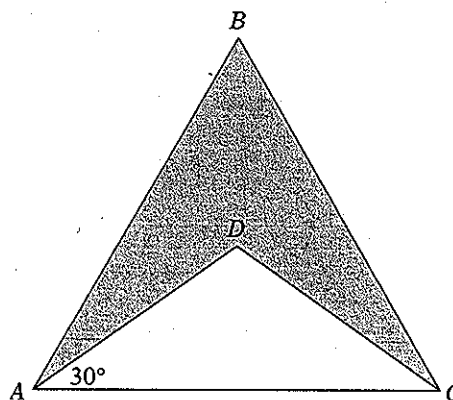
- A. 110
- B. 70
- C. 50
- D. 40
- E. 30

25. $a + b + c + d =$



- A. 360
- B. 230
- C. 180
- D. 130
- E. 90

26. $\triangle ABC$ is an equilateral triangle and $\triangle ADC$ is an isosceles triangle. If $AD = 12$ what is the area of the shaded region?



- A. $108\sqrt{23}$
- B. $72\sqrt{3}$
- C. $36\sqrt{3}$
- D. 144
- E. 72