

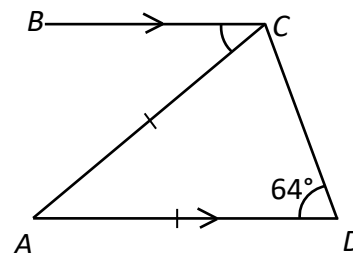
TB(2B) Ch. 10 Angles Related to Triangles and Polygons

Multiple Choice Questions

1. [16-17 Final Exam #8]

In the figure, $AC = AD$. If $BC \parallel AD$, then $\angle ACB =$

- A. 52° .
- B. 62° .
- C. 64° .
- D. 78° .



2. [16-17 Final Exam #16]

If the interior angle of a regular polygon is 144° greater than its exterior angle, find the number of sides of the polygon.

- A. 16
- B. 18
- C. 20
- D. 22

3. [17-18 S Test 2 #8]

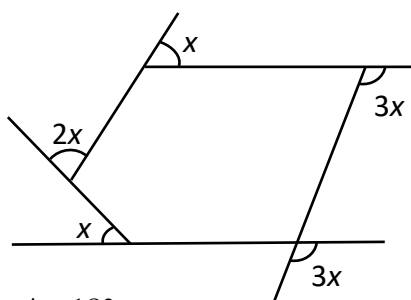
If an interior angle of a regular n -sided polygon is eight times of an exterior angle, which of the following are true?

- I. The value of n is 18.
- II. An interior angle of the polygon is greater than an exterior angle by 140° .
- III. The number of axes of reflectional symmetry of the polygon is 9.

- A. I and II only
- B. I and III only
- C. II and III only
- D. I, II and III

4. [17-18 Final #8]

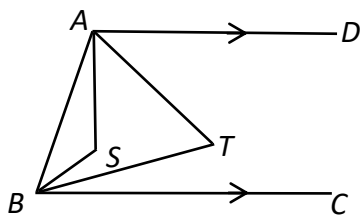
In the figure, $x =$



- A. 18° .
- B. 36° .
- C. 45° .
- D. 54° .

5. [17-18 Final #17]

In the figure, $AD \parallel BC$, $\angle SAT = \angle TAD$, $\angle SBT = \angle TBC$ and $\triangle ABT$ is an equilateral triangle.



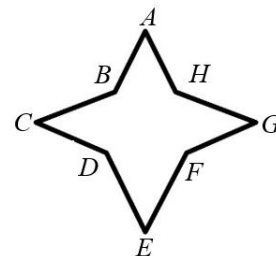
Find reflex $\angle ASB$.

- A. 220°
- B. 240°
- C. 280°
- D. 300°

6. [18-19 S Test 2 #4]

In the figure, the sum of all the interior angles of the polygon $ABCDEFGH$ is

- A. 180° .
- B. 360° .
- C. 1080° .
- D. 1440° .



7. [18-19 S Test 2 #7]

In a regular n -sided polygon, an interior angle is larger than an exterior angle by 60° . Find the value of n .

- A. 3
- B. 6
- C. 9
- D. 12

8. [18-19 S Test 2 #8]

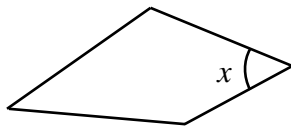
It is given that one of the interior angles of an isosceles triangle is 70° . Which of the following can be the size of the other angles in the same triangle?

- I. 40°
 - II. 55°
 - III. 70°
- A. I and II only
 - B. I and III only
 - C. II and III only
 - D. I, II and III

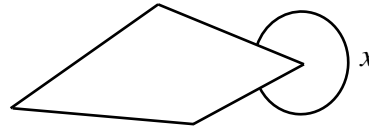
9. [18-19 Final #6]

In which of the following figures, x is an exterior angle of the quadrilateral?

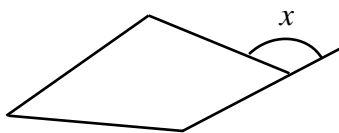
A.



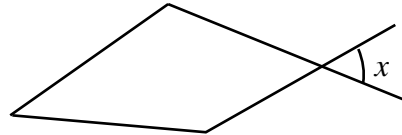
B.



C.



D.

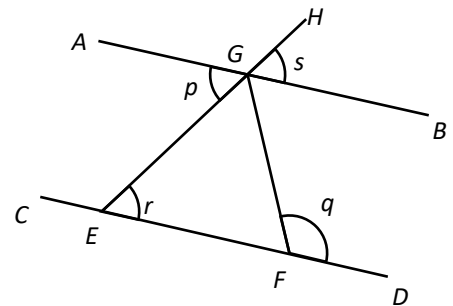


10. [20-21 Final Exam #11]

In the figure, AGB , $CEFD$ and EGH are straight lines and $\triangle EFG$ is an equilateral triangle. Which of the followings must be true?

- I. $p = r$
- II. $q = 2r$
- III. $s = 60^\circ$

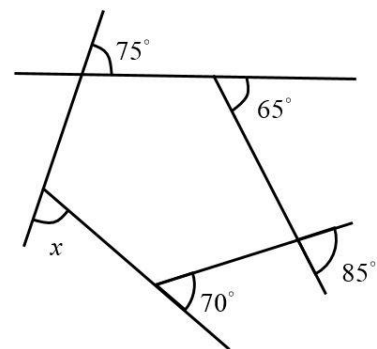
- A. I only
- B. II only
- C. I and III only
- D. II and III only



11. [20-21 Final Exam #22]

In the figure, $x =$

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



~ End ~