

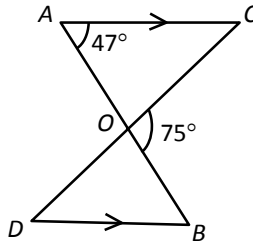
## TB(1B) Ch. 11 Angles related to lines

### Multiple Choice Questions

1. [13-14 Standardised Test 2, Q5]

In the figure, straight lines  $AB$  and  $CD$  intersect at point  $O$  and  $AC \parallel DB$ . Find  $\angle BDC$ .

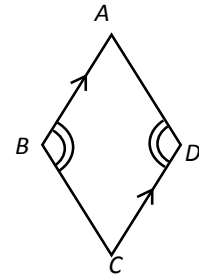
- A.  $22^\circ$
- B.  $28^\circ$
- C.  $32^\circ$
- D.  $38^\circ$



2. [13-14 Standardised Test 2, Q10]

In the figure,  $\angle ABC = \angle ADC$  and  $AB \parallel CD$ . Which of the followings are true?

- I.  $AD \parallel BC$
- II.  $\angle BAD = \angle BCD$
- III.  $\angle ABC$  and  $\angle ADC$  is a pair of alternate angles.



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

3. [13-14 Final Exam]

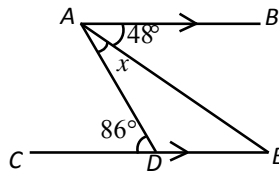
The size of an exterior angle of a regular  $n$ -sided polygon is  $20^\circ$ . Find the value of  $n$ .

- A. 9
- B. 18
- C. 20
- D. 36

4. [13-14 Final Exam]

In the figure, find  $x$ .

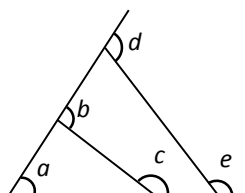
- A.  $38^\circ$
- B.  $40^\circ$
- C.  $48^\circ$
- D.  $86^\circ$



5. [13-14 Final Exam]

Which of the following must be correct?

- I.  $a = d - e$
- II.  $b + c = d + e$
- III.  $b + c - a = 180^\circ$

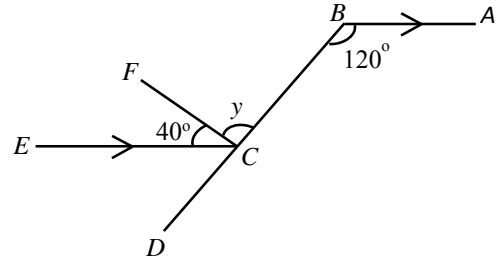


- A. I and II only
- B. I and III only
- C. II and III only
- D. I, II and III

6. [14-15 Standardized Test Q.5]

In the figure,  $DCB$  is a straight line. Find the value of  $y$ .

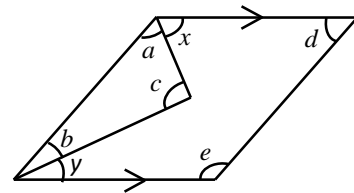
- A.  $40^\circ$
- B.  $80^\circ$
- C.  $90^\circ$
- D.  $120^\circ$



7. [14-15 Standardized Test Q.10]

Which of the following is incorrect?

- A.  $c = x + y$
- B.  $a + b + c = 180^\circ$
- C.  $a + x + d = 180^\circ$
- D.  $a + x + b + y = 180^\circ$

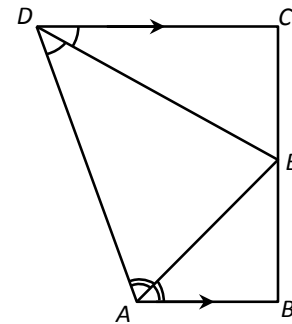


8. [14-15 Final Exam, #20]

In the figure,  $ABCD$  is a trapezium with  $AB \parallel DC$ .  $AE$  bisects  $\angle DAB$  and  $DE$  bisects  $\angle ADC$ . Which of the following must be correct?

- I.  $BE = EC$
- II.  $\angle AED = 90^\circ$
- III.  $\triangle ABE \sim \triangle ECD$

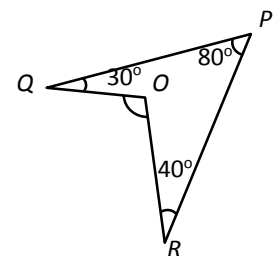
- A. I only
- B. II only
- C. I and III only
- D. II and III only



9. [15-16 Final Exam, #20]

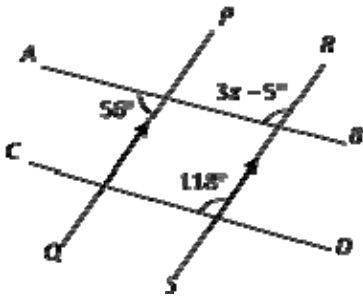
In the figure,  $\angle P = 80^\circ$ ,  $\angle Q = 30^\circ$  and  $\angle R = 40^\circ$ . Find  $\angle QOR$ .

- A.  $110^\circ$
- B.  $120^\circ$
- C.  $150^\circ$
- D.  $160^\circ$



10. [16-17 Final Exam, #10]

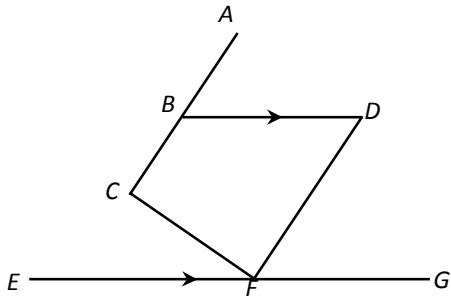
Four straight lines  $AB$ ,  $CD$ ,  $PQ$  and  $RS$  are intersecting as shown in the figure. It is given that  $PQ \parallel RS$ . Find  $x$ .



- A.  $20^\circ$
- B.  $22^\circ$
- C.  $41^\circ$
- D.  $43^\circ$

11. [16-17 Final Exam, #20]

In the figure,  $EFG$  is a straight line. It is given that  $BD \parallel EG$ .



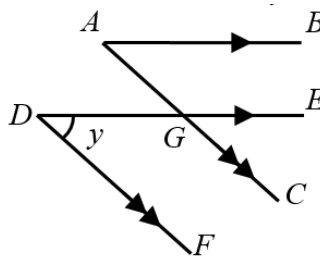
If  $\angle ABD = \angle CFE = \angle CFD = x$ , which of the following must be true?

- I.  $x = 60^\circ$
  - II.  $\angle BCF = 2x$
  - III.  $BCFD$  is a trapezium.
- A. I only
  - B. II only
  - C. I and III only
  - D. II and III only

12. [17-18 Standardised Test 2, Q4]

In the figure,  $AB \parallel DE$  and  $AC \parallel DF$ . Which of the following angles may not have the same value as  $y$ ?

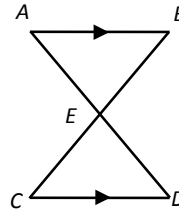
- A.  $\angle AGD$
- B.  $\angle BAG$
- C.  $\angle CGD$
- D.  $\angle EGC$



13. [17-18 Standardised Test 2, Q9]

In the figure,  $AB \parallel CD$ .  $AED$  and  $BEC$  are straight lines. Which of the following must be true?

- I.  $\angle AEC = \angle ABE + \angle CDE$
- II.  $\angle ABE = \angle DCE$
- III.  $\triangle AEB \cong \triangle DEC$

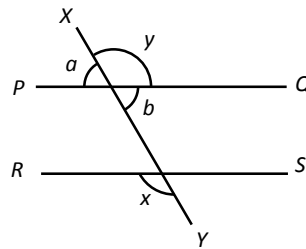


- A. I and II only
- B. I and III only
- C. II and III only
- D. I, II and III

14. [17-18 Standardised Test 2, Q10]

In the figure,  $PQ$ ,  $RS$  and  $XY$  are straight lines. Under which of the following conditions would  $PQ$  and  $RS$  form a pair of parallel lines?

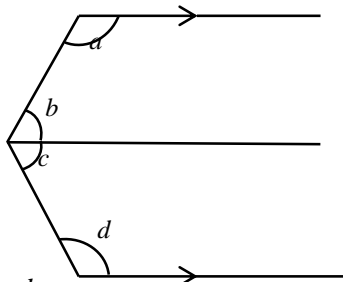
- I.  $x = y$
- II.  $b = 180^\circ - x$
- III.  $a + b + x + y = 360^\circ$



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

15. [17-18 Final Exam, Q20]

Which of the following must be true?



- A.  $a = d$
- B.  $a + b = 180^\circ$
- C.  $c + d = 180^\circ$
- D.  $a + b + c + d = 360^\circ$

~ End ~