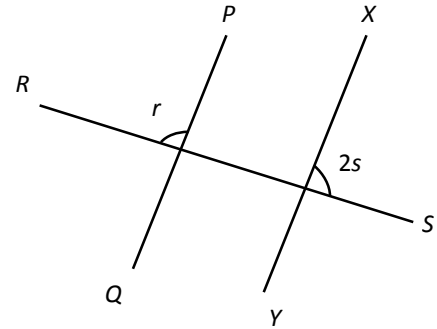


## TB(1B) Ch. 11 Angles related to lines

### Multiple Choice Questions

1. [11-12 Final Exam Q6]

In the figure,  $PQ$  and  $XY$  are cut by  $RS$ . Which of the following are possible values of  $r$  and  $s$  such that  $PQ \parallel XY$ ?

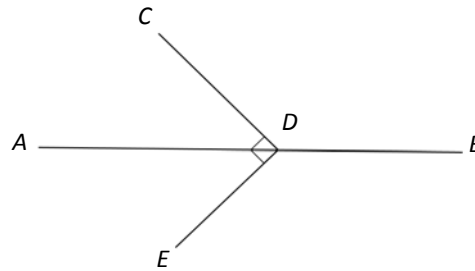


- A.  $r = 30^\circ, s = 30^\circ$
- B.  $r = 45^\circ, s = 90^\circ$
- C.  $r = 90^\circ, s = 45^\circ$
- D.  $r = 120^\circ, s = 60^\circ$

2. [11-12 Final Exam Q7]

In the figure,  $ADB$  is a straight line and  $\angle CDE = 90^\circ$ . Which of the following are correct?

- I.  $AD$  bisects  $\angle CDE$ .
- II.  $\angle CDB$  is an obtuse angle.
- III.  $\angle ADC + \angle CDB = \angle ADE + \angle BDE$ .



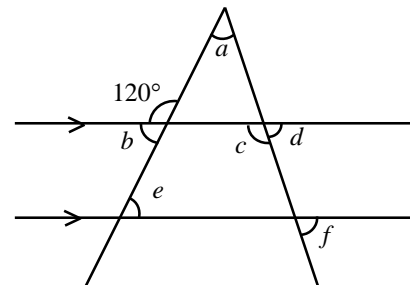
- A. I and II only
- B. I and III only
- C. II and III only
- D. I, II and III

3. [11-12 Final Exam Q20]

In the figure, which of the following must be true?

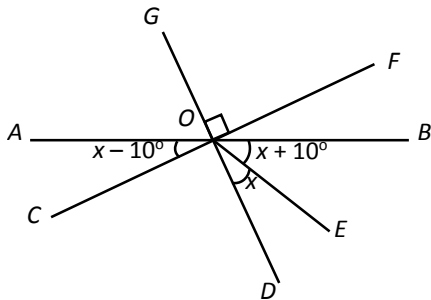
- I.  $d = 60^\circ$
- II.  $a + b + d = 180^\circ$
- III.  $c + e + f = 240^\circ$

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



4. [12-13 Standardised Test 2, Q6]

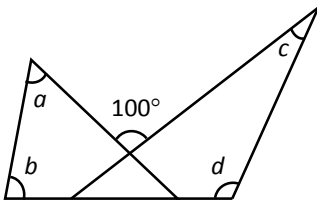
In the figure,  $AOB$ ,  $COF$  and  $DOG$  are straight lines. Find  $x$ .



- A.  $20^\circ$
- B.  $25^\circ$
- C.  $30^\circ$
- D.  $60^\circ$

5. [12-13 Standardised Test 2, Q10]

In the figure, find  $a + b + c + d$ .

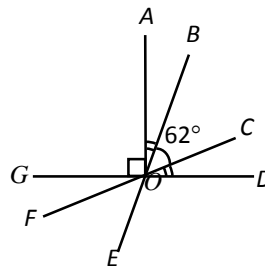


- A.  $260^\circ$
- B.  $280^\circ$
- C.  $360^\circ$
- D.  $440^\circ$

6. [12-13 Final Exam Q7]

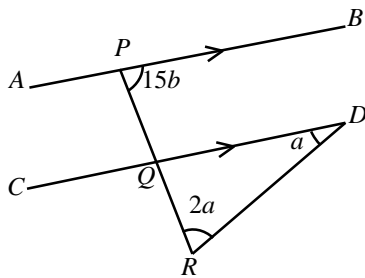
The figure shows 3 straight lines,  $BOE$ ,  $COF$  and  $DOG$ . If  $\angle BOC = 62^\circ$  and  $\angle AOB = \angle COD$ , find  $\angle DOE$ .

- A.  $76^\circ$
- B.  $104^\circ$
- C.  $118^\circ$
- D.  $121^\circ$



7. [12-13 Final Exam Q10]

In the figure,  $AB \parallel CD$  and  $PQR$  is a straight line. Which of the following are possible values of  $a$  and  $b$ ?

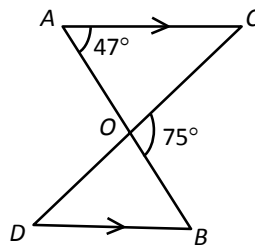


- A.  $a = 10^\circ$  and  $b = 10^\circ$
- B.  $a = 20^\circ$  and  $b = 30^\circ$
- C.  $a = 30^\circ$  and  $b = 20^\circ$
- D.  $a = 40^\circ$  and  $b = 60^\circ$

8. [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.  $38^\circ$

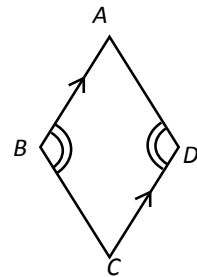


9. [13-14 Standardised Test 2, Q10]

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



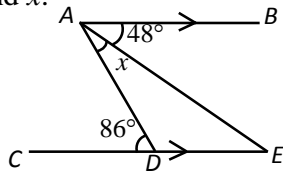
10. [13-14 Final Exam]

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

11. [13-14 Final Exam]

In the figure, find  $x$ .

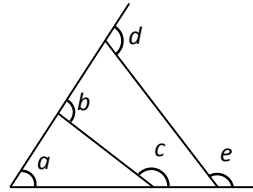


- A.  $38^\circ$
- B.  $40^\circ$
- C.  $48^\circ$
- D.  $86^\circ$

12. [13-14 Final Exam]

Which of the following must be correct?

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

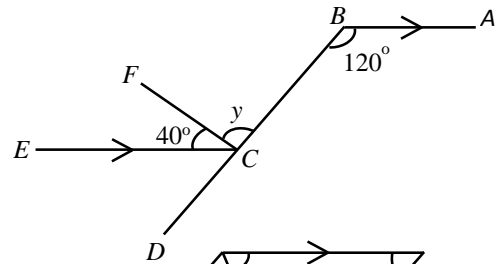


- A. I and II only
- B. I and III only
- C. II and III only
- D. I, II and III

13. [14-15 Standardized Test Q.5]

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

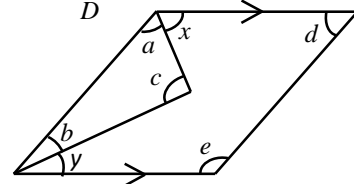
- A.  $40^\circ$
- B.  $80^\circ$
- C.  $90^\circ$
- D.  $120^\circ$



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

Which of the following is incorrect?

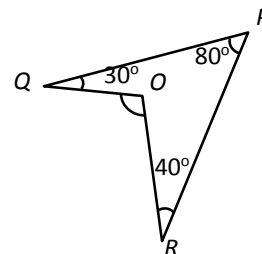
- A.  $c = x + y$
- B.  $a + b + c = 180^\circ$
- C.  $a + x + d = 180^\circ$
- D.  $a + x + b + y = 180^\circ$



15. [15-16 Final Exam, #14]

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.  $160^\circ$



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

The size of each interior angle of a regular polygon is  $162^\circ$ . The number of sides of the polygon is

- A. 10.
- B. 18.
- C. 20.
- D. 36.

~ End ~