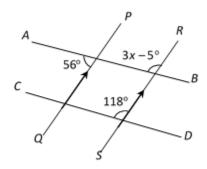
# TB(1B) Ch.8-Angles Related to Straight Lines and Triangles Multiple Choice Questions

#### 1. [16-17 Final Exam, #10]

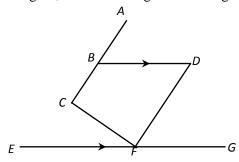
Four straight lines AB, CD, PQ and RS are intersecting as shown in the figure. It is given that PQ // RS. Find x.



- **A.** 20°
- **B.** 22°
- **C.** 41°
- **D.** 43°

#### 2. [16-17 Final Exam, #20]

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



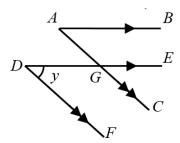
If  $\angle ABD = \angle CFE = \angle CFD = x$ , which of the following must be true?

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

#### 3. [17-18 Standardised Test 2, Q4]

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

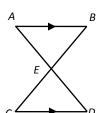
- **A.**  $\angle AGD$
- **B.**  $\angle BAG$
- **C.** ∠*CGD*
- **D.** ∠*EGC*



## 4. [17-18 Standardised Test 2, Q9]

In the figure, AB // 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



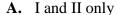
# 5. [17-18 Standardised Test 2, Q10]

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?

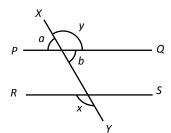
I. 
$$x = y$$

II. 
$$b = 180^{\circ} - x$$

III. 
$$a + b + x + y = 360^{\circ}$$

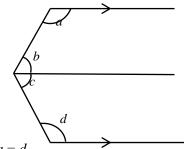


- **B.** I and III only
- C. II and III only
- D. I, II and III



#### 6. [17-18 Final Exam, Q20]

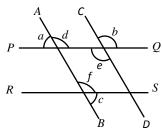
Which of the following must be true?



- $\mathbf{A.} \quad a = d$
- **B.**  $a + b = 180^{\circ}$
- **C.**  $c + d = 180^{\circ}$
- **D.**  $a + b + c + d = 360^{\circ}$

#### 7. [18-19 Standardised Test 2, Q3]

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

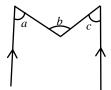


- **A.** a = c
- **B.** e = f
- C. d = e
- **D.**  $a + d = 180^{\circ}$

#### 8. [18-19 Standardised Test 2, Q9]

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

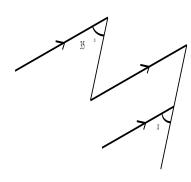
- $\mathbf{A.} \quad a = c$
- **B.**  $a = \frac{b}{2}$
- **C.** a + c = b
- **D.**  $a + b + c = 360^{\circ}$



# 9. [18-19 Final Exam, Q10]

In the figure, find the value of x.

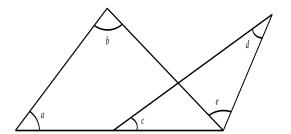
- **A.** It cannot be determined.
- **B.** 35°
- **C.** 45°
- **D.** 55°



# 10. [18-19 Final Exam, Q18]

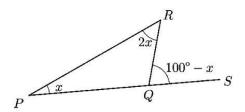
In the figure, e =

- **A.** a b + c d.
- **B.** a + b c d.
- **C.** a + b + c d.
- **D.** a b c d.



# 11. [20-21 Standardized Test, #3]

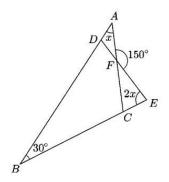
In the figure, PQS is a straight line. Find x.



- **A.** 25°
- **B.** 40°
- **C.** 50°
- **D.** 75°

#### 12. [20-21 Standardized Test, #7]

In the figure, C and D are points on BE and AB respectively. AC and DE intersect at F. Find x.



**A.** 30°

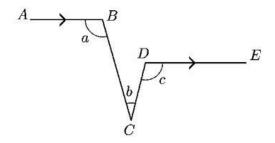
**B.** 40°

**C.** 50°

**D.** 80°

### 13. [20-21 Standardized Test, #8]

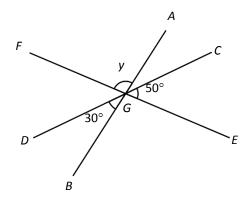
According to the figure, which of the following must be true?



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

# 14. [20-21 Final Exam, #6]

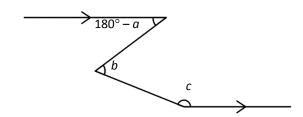
In the figure, AB, CD and EF intersect at G. Find the value of y.



- **A.** 30°
- **B.** 50°
- **c.** 80°
- **D.** 100°

#### 15. [20-21 Final Exam, #21]

According to the figure, which of the following must be true?



- **A.**  $a+b+c=180^{\circ}$
- **B.**  $a+b+c=360^{\circ}$
- c. c = a + b
- **D.**  $a-b+c=180^{\circ}$

# 16. [20-21 S.2 Final #10]

In the figure, AB // DE. ADCF and BECG are straight lines. Express c in terms of a and b.

A. 
$$c = 180^{\circ} - a + b$$

B. 
$$c = 180^{\circ} - a - b$$

C. 
$$c = a + b$$

$$D. \quad c = a - b$$

