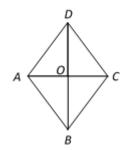
TB(3A) Ch.5 Quadrilaterals

Multiple Choice Questions

1. [16-17 Mid-year Exam Q9]

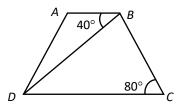
In the figure, ABCD is a rhombus, where OA = 3 cm and OD = 4 cm. Find the area of ABCD.

- **A.** 12 cm^2
- **B.** 24 cm^2
- **C.** 36 cm^2
- **D.** 48 cm^2



2. [16-17 Mid-year Exam Q18]

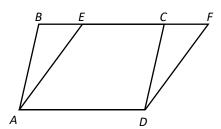
In the figure, ABCD is an isosceles trapezium. Which of the following may not be correct?



- **A.** $\angle ADC = 2 \angle ABD$
- **B.** AB = AD
- C. CD = 2AB
- **D.** BD is an angle bisector of $\angle ADC$

3. [16-17 Mid-year Exam Q20]

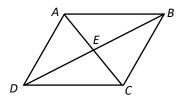
In the figure, ABCD and AEFD are parallelograms. Which of the following are correct?



- **I.** $\angle ADC = \angle DCF$
- **II.** $\triangle ABE \cong \triangle DCF$
- **III.** $\angle ADF = \angle ABE + \angle BAE$
- **A.** I and II only
- **B.** I and III only
- C. II and III only
- **D.** I, II and III

4. [16-17 Final Exam Q24]

In the figure, ABCD is a parallelogram and $\angle ADB = \angle ABD$. AC and BD intersect at E. Which of the following must be true?



- I. $AC \perp BD$
- II. $\angle CAD = \angle ACD$
- III. $AE \times EB = CE \times ED$
- A. I only
- **B.** I and II only
- C. II and III only
- **D.** I, II and III

5. [17-18 Mid-year Exam Q9]

In the figure, ABCD is a square and AEFG is a rhombus. CGDE is a straight line. If $\angle AED = 70^{\circ}$,

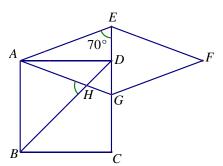
then $\angle AHB =$



B. 70°.

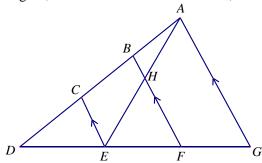
C. 75°.

D. 80°.



6. [17-18 Mid-year Exam Q10]

In the figure, AB = BC = CD. If BH = 1 cm, then HF =

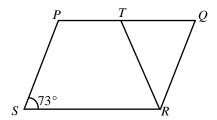


- **A.** 2 cm.
- **B.** 3 cm.
- **C.** 4 cm.
- **D.** 5 cm.

7. [17-18 Final Exam Q3]

In the figure, PQRS is a parallelogram and TR=QR. Find $\angle PTR$.

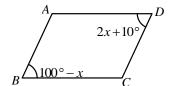
- **A.** 73°
- **B.** 83°
- **C.** 107°
- **D.** 117°



8. [18-19 Mid-year Exam Q8]

In the figure, ABCD is a parallelogram. x =

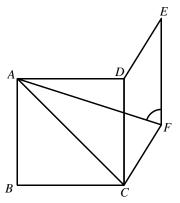
- **A.** 30°.
- **B.** 50°.
- **C.** 70°.
- **D.** 90°.



9. [18-19 Mid-year Exam Q9]

In the figure, ABCD is a square and CDEF is a parallelogram. If AC = AF and $\angle CAF = 40^{\circ}$, find $\angle AFE$.

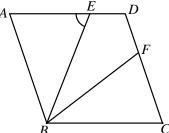
- **A.** 70°
- **B.** 75°
- **C.** 80°
- **D.** 85°



10. [18-19 Mid-year Exam Q17]

In the figure, ABCD is a rhombus. E and F are points lying on AD and CD respectively such that DE = DF and $\angle EBF = 36^{\circ}$. If $\angle ADC = 100^{\circ}$, then $\angle AEB =$

- **A.** 64°.
- **B.** 68°.
- **C.** 72°.
- **D.** 74°.



11. [18-19 Mid-year Exam Q20]

ABCD is a parallelogram. Let *E* be the mid-point of *BC*. If $\angle BAE = \angle CAE = \angle CAD$, which of the following must be true?

I.
$$AE = EC$$

II.
$$AB = BE$$

III.
$$\triangle ACD \sim \triangle AEB$$

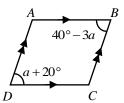
12. [18-19 Final Exam Q4]

In the figure, ABCD is a parallelogram. Find a.

B. 5°

C. 10°

D. 20°



13. [18-19 Final Exam Q5]

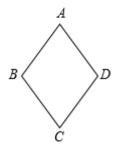
In the figure, ABCD is a rhombus. If AC = 16 cm and BD = 12 cm, find the area of ABCD.

A.
$$24 \text{ cm}^2$$

B. 96 cm^2

C. 100 cm^2

D. 192 cm^2



14. [19-20 Mid-year Exam Q8]

In the figure, *ABCD* is a square. If

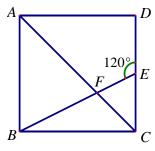
$$\angle DEF = 120^{\circ}$$
, then $\angle BFC =$

E. 60°.

F. 75°.

G. 105°.

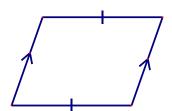
H. 165°.



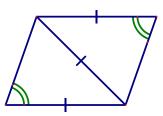
15. [19-20 Mid-year Exam Q9]

Which of the following quadrilaterals must be a parallelogram?

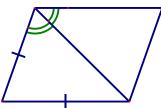
A.



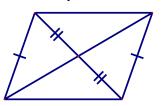
B.



C.

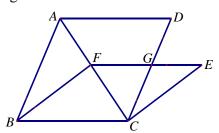


D.



16. [19-20 Mid-year Exam Q20]

In the figure, *ABCD* is a rhombus. *BCEF* is a parallelogram where *F* lies on *AC*. *CD* and *EF* meet at *G*. Which of the following must be true?



I.
$$\angle BAC = \angle CFE$$

II. $CG = FG$

$$II.CU = FU$$

III.
$$\angle ABF = \angle GCE$$

A. I and II only

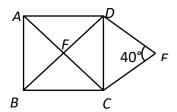
B. I and III only

C. II and III only

D. I, II and III

17. [20-21 Mid-year Exam #5]

In the figure, ABCD is a square and $\triangle CDE$ is an isosceles triangles with CE = DE. AC meets BD at F. It is given that $\angle CED = 40^{\circ}$. Find $\angle BDE$.

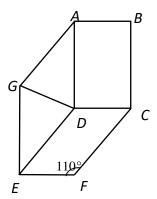


- **A.** 85°
- **B.** 95°
- **C.** 105°
- **D.** 115°

18. [20-21 Mid-year Exam #10]

In the figure, ABCD is a rectangle. CDEF is a parallelogram with $\angle CFE = 110^{\circ}$. If ADEG is a rhombus, which of the following may not be correct?

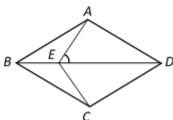
- **A.** GE//AF
- **B.** $\angle AGD = 80^{\circ}$
- **C.** *AEFB* is a parallelogram.
- **D.** $\triangle GEF$ is a right-angled triangle.



19. [20-21 Final Exam #6]

In the figure, ABCD is a rhombus. E is a point on the diagonal BD. $\angle ABE = 22^{\circ}$ and $\angle ECD = 80^{\circ}$. Find $\angle AED$.

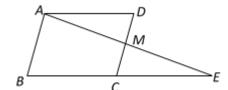
- **A.** 56°
- **B.** 58°
- **C.** 78°
- **D.** 80°



20. [20-21 Final Exam #24]

In the figure, *ABCD* is a parallelogram. *M* is the mid-point of *CD*. *AM* and *BC* are produced to meet at *E*. Which of the following must be true?

- **I.** $\triangle AMD \cong \triangle EMC$
- **II.** BC = CE
- **III.** $\triangle ABE \sim \triangle MCE$



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