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CHAPTER 8 Chapter Practice Test

MULTIPLE CHOICE.

Show all work!!!!

1. *Multiple Choice* The perimeter of a square $MNOP$ is 72 inches, and $NO = 2x + 6$. What is the value of x?

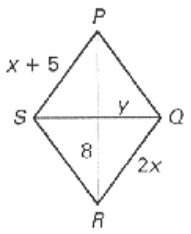
   (A) 15 (B) 12 (C) 6
   (D) 9 (E) 18

2. The bases of trapezoid $PQRS$ are $\overline{PQ}$ and $\overline{SR}$, and the midsegment is $\overline{MN}$. Given $PQ = 9$ centimeters, and $MN = 7.2$ centimeters, what is SR?

   (A) 5.4 cm (B) 8.1 cm
   (C) 10.8 cm (D) 12.6 cm

3. *Multiple Choice* In the diagram below, $PQRS$ is a rhombus. What are the values of x and y?

   (A) $x = \frac{5}{3}, y = 4$
   (B) $x = 5, y = 2$
   (C) $x = 10, y = 4$
   (D) $x = 5, y = 6$
   (E) $x = 10, y = 6$

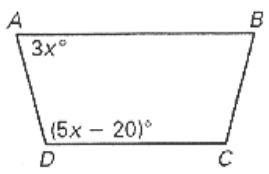


4. *Multiple Choice* What is the measure of an exterior angle if the regular polygon has 18 sides?

   (A) 18° (B) 20° (C) 22°
   (D) 24° (E) 26°

5. *Multiple Choice* What value of x would make quadrilateral $ABCD$ a trapezoid?

   (A) 30 (B) 20
   (C) 25 (D) 35
   (E) 10



6. *Multiple Choice* Which statements below are always true about a trapezoid?

   I. Exactly one pair of opposite sides are congruent.

   II. Exactly one pair of opposite sides are parallel.

   III. The diagonals are congruent.

   (A) I (B) II (C) III
   (D) I and II (E) none of these

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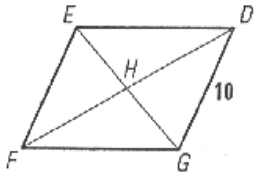
CHAPTER 8 **Chapter Practice Test** *continued*

Complete questions 7-10 given that *DEFG* is a rhombus.



7. **a.** If $DH = 8.5$, $DF =$ _____. **b.** Find HG. _____

8. If $m\angle GDE = 68°$, $m\angle EDF =$ _____° & $m\angle DEH =$ _____°

9. Find the perimeter of *DEFG*. _____

10. $m\angle FHG =$ _____°

For #11-14, decide whether the statement is TRUE or FALSE.

11. All rectangles are squares. _____

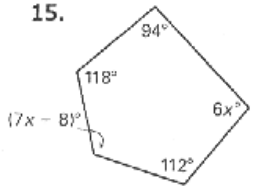
12. A kite is a parallelogram. _____

13. All rectangles are quadrilaterals. _____

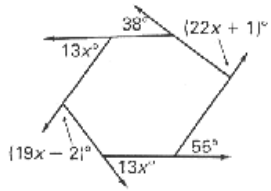
14. All quadrilaterals are squares. _____

For #15-16, find the value of x.

15.



16.

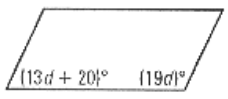


For #17-18, name the figure described below.

17. a quadrilateral with exactly one pair of parallel sides _____

18. a quadrilateral with exactly one pair of opposite angles congruent and perpendicular diagonals _____

19. For what value of d is the quadrilateral a parallelogram?



A. 5 **B.** 10 **C.** 8 **D.** 11.9

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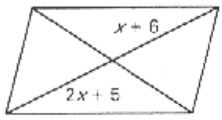
CHAPTER 8 **Chapter Practice Test** *continued*

Find the values of x and y in the parallelogram.

20.



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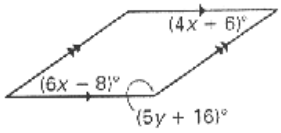
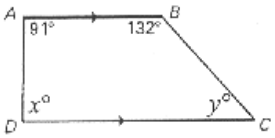


Find the values of x and y.

22.



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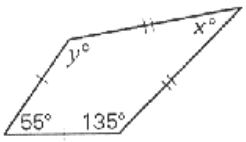

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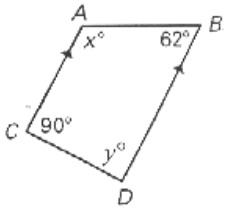

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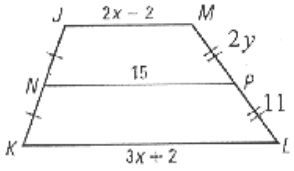
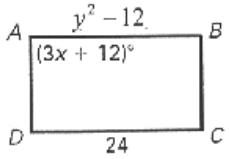


26. *ABCD* is a rectangle.



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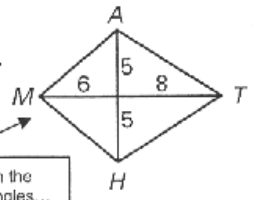
CHAPTER 8 **Chapter Practice Test** *continued*

Find the length of the sides to the nearest hundredth or the measure of the angles in kite *MATH*.

27.

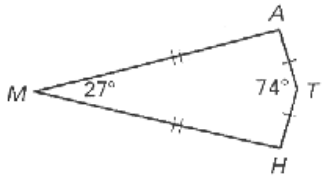


Draw in the right angles... Then use Pythagorean Theorem!

MA = _____ *AT* = _____

MH = _____ *TH* = _____

28.



m∠A = _____

m∠H = _____

The sum of the measures of the interior angles of a convex polygon is given. Classify the polygon by the number of sides.

29. 1800°

30. 3960°

Find the sum of the measures of the interior angles of the indicated convex polygon.

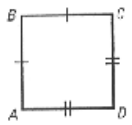
31. Heptagon

32. 50-gon

33. 30-gon

34. For the quadrilaterals below, what is the most specific name you can give it?

a.



b.