

WORKSHEET 2 PROPERTIES OF 2D FIGURES - CHAPTER 7

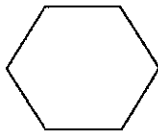
ON MY UNCLE'S FARM, WHY DO THE BLACK HORSES EAT MORE THAN THE WHITE HORSES?



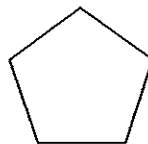
1 Name a plane figure with the given number of sides. (a) 8 (b) 10 (c) 3

2 Which one of these 3 figures is a non-convex figure?

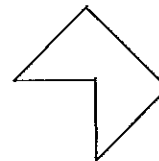
[A]



[B]

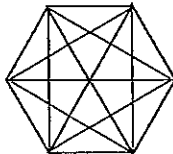


[C]



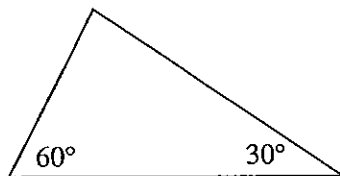
3 How many diagonals has a hexagon?

(a)

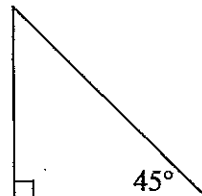


4 Which triangle is isosceles?

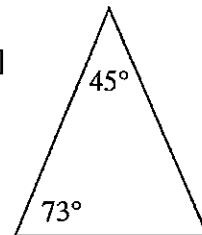
[A]



[B]



[C]

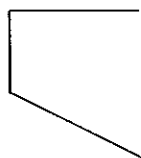


5 Name the quadrilateral shown.

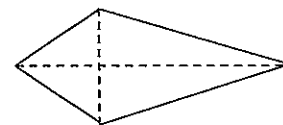
(a)



(b)



(c)



6 Answer True or False to these statements

- (a) The diagonals of a parallelogram are perpendicular.
- (b) The diagonals of a rectangle are equal.
- (c) The diagonals of a rhombus bisect each other.

7 Answer True or False to these statements

- (a) All rectangles are parallelograms.
- (b) All squares are rectangles.
- (c) All kites are parallelograms.

8 How many axes of symmetry do the following triangles have?

- (a) Isosceles triangle
- (b) Scalene triangle
- (c) Equilateral triangle

9 How many axes of symmetry do these quadrilaterals have?
 (a) Parallelogram (b) Kite (c) Square

10 What is the order of rotational symmetry of:
 (a) An equilateral triangle (b) A rhombus (c) A hexagon.

11 Which quadrilateral is identified uniquely by this property?
 (a) Only one pair of opposite sides parallel.
 [A] Kite [B] Parallelogram [C] Rhombus [D] Trapezium

(b) No equal angles.
 [A] Kite [B] Parallelogram [C] Square [D] none of these

(c) Equal diagonals
 [A] Rectangle [B] Rhombus [C] Parallelogram [D] Kite

12 Here is a shape made up of 5 joined squares. What is this shape called?



13 A tiling pattern consists of
 [A] All regular shapes that cover the plane.
 [B] A mixture of regular and irregular figures that cover the plane.
 [C] Only irregular figures that cover the plane.
 [D] Any set of interlocking shapes that cover the plane.

14 What is meant by a 4.8.8 regular tessellation? State the names of the shapes that appear in this pattern.

15 What is the sum of the angles in a regular octagon?

16 What is the size of each internal angle in a regular octagon?

Answers:

A	B	C	D	E	H	K	L	M
0	C	3	Pentomino	Square	D	B	1	Octagon
1		2		Octagon			0	Decagon
4		1		Octagon			3	Triangle

N	O	R	S	T	W	I
9	Parallelogram	True	False	D	1080°	135°
	Trapezium	True	True	D		
	Kite	False	True	A		

13 14 13 9 12 1 5 7 14 2 8 9 10 4 13 5 7 6 14 6

11 13 9 3 15 13 16 11 14 13 5 7 6 14 6