

Mandalay International Science Academy

Unit 8.3 Geometry – Quiz #1 MAKEUP

Sections A – F

[26 points total]

Section A. For the following questions, read the description of each quadrilateral and write the name of the appropriate quadrilateral in the given blank. If you think there are two possible answers (e.g. if you think you can answer both a square or a rectangle) then either answer will get you a point, assuming it is correct.

[Section A: 3 points]

Square	Quadrilateral	Trapezoid	Kite
Parallelogram	Rectangle		Rhombus

1) - I have two pairs of parallel sides

- All my sides are equal
- All my angles are 90°

What am I?

[1 point]

2) - I have four sides

What am I?

[1 point]

3) - I have two pairs of equal sides

- I have one pair of equal angles that are opposite to each other

What am I?

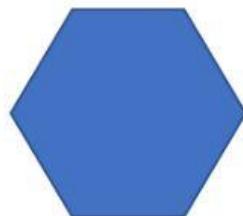
[1 point]

Section B. Multiple choice answers. Pick one answer that you think is correct.

[Section B: 3 points]

4) This regular hexagon (6-sided) has _ orders of rotation (orders of rotational symmetry).

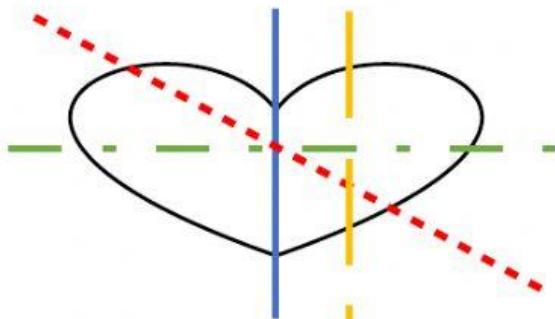
- A) 1
- B) 7
- C) 5
- D) None of the above



[1 point]

5) Which of these is a line of symmetry?

- A) A red dashed horizontal line.
- B) A yellow solid horizontal line.
- C) A green dashed horizontal line.
- D) A blue solid horizontal line.



[1 point]

6) A regular decagon has 10 orders of rotation. How many lines of symmetry does it have?

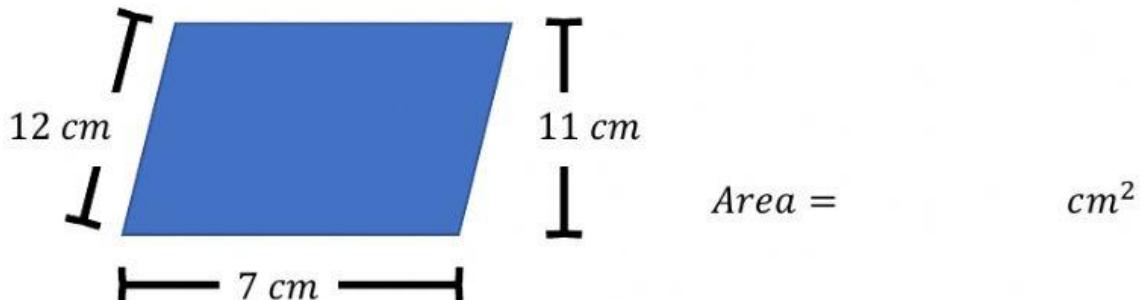
- A) 3
- B) 6
- C) 9
- D) None of the above

[1 point]

Section C. The following questions are related to the area of parallelograms.

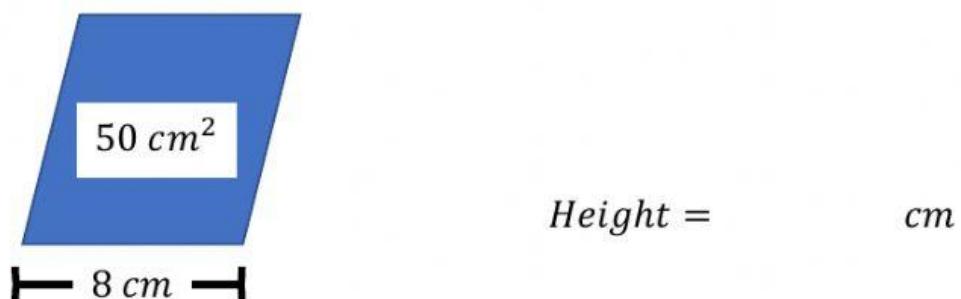
[Section C: 4 points]

7) Find the area of the given parallelogram.



[2 points]

8) Find the missing height of the given parallelogram.

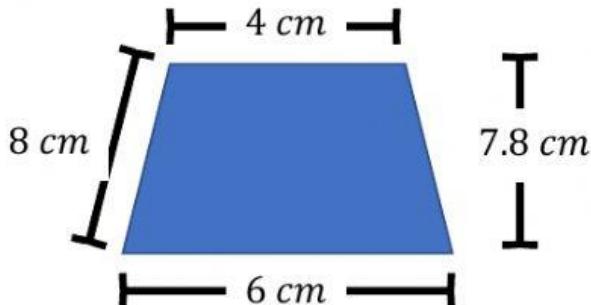


[2 points]

Section D. The following questions are related to the area of trapezoids

[Section D: 4 points]

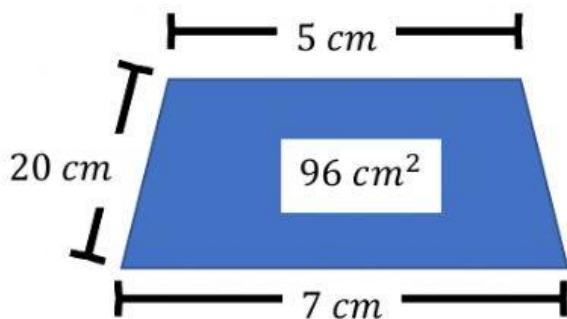
9) Find the area of this trapezoid.



$$\text{Area} = \text{cm}^2$$

[2 points]

10) Find the missing height of this trapezoid.



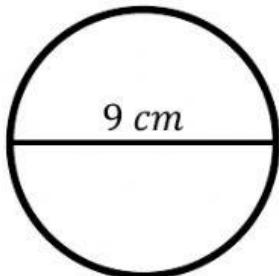
$$\text{Height} = \text{cm}$$

[2 points]

Section E. For the following questions use $\pi = 3.14$. Round answers to 2 decimal places.

[Section E: 4 points]

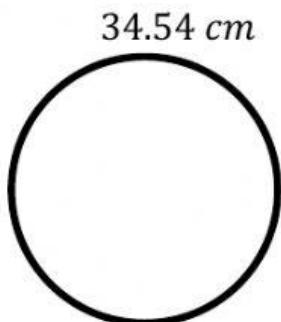
11) The given circle has a diameter of 9 cm. What is its circumference?



Circumference = cm

[2 points]

12) The given circle has a circumference of 34.54 cm. What is its radius?



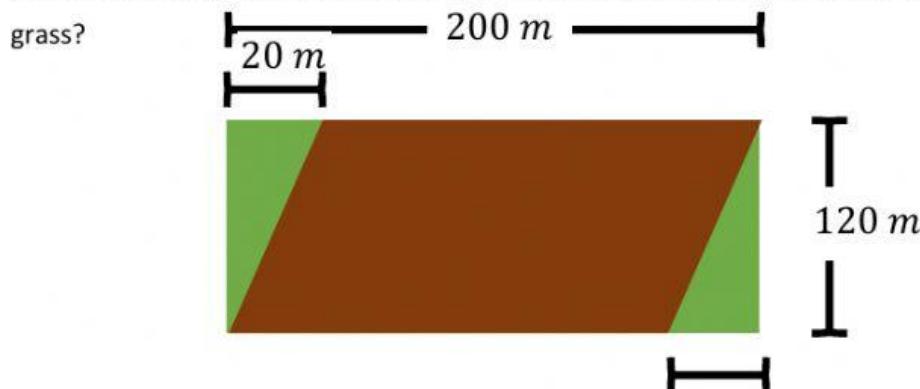
Radius = cm

[2 points]

Section F. Word Problems.

[Section F: 8 points]

13) A park is to be constructed in a patch of land that is 300 m long by 120 m wide. Grass will be planted in part of the field (shown in green) and brick will be laid on the rest (shown in brown). What is the total area covered in brick? What is the area covered in grass?



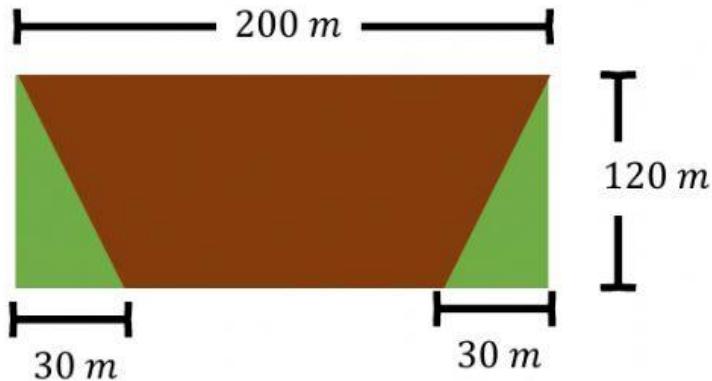
Area covered in brick = m^2

[2 points]

Area covered in grass = m^2

[2 points]

The grass design was changed to the one shown below. What is the total area covered in brick? What is the area covered in grass?



Area covered in brick = m^2

[2 points]

Area covered in grass = m^2

[2 points]