



PMA Mathematics Reviewer Practice Questions

Set 3: Geometry and Trigonometry

Directions: Choose the letter that corresponds to the correct answer to each question below.

1) What is the measure of an interior angle of a regular hexagon?

- (a) 240 degrees
- (b) 180 degrees
- (c) 155 degrees
- (d) 120 degrees

2) The congruent sides of an isosceles triangle measure 25.5 cm each. If the perimeter of the isosceles triangle is 70 cm, determine the length of the remaining side of the isosceles triangle.

- (a) 21 cm
- (b) 19 cm
- (c) 17 cm
- (d) 15 cm

3) Two legs of a right triangle measure 6 meters and 9 meters respectively. What is the measure of its longest side?

- (a) $\sqrt{15}$ meters
- (b) $\sqrt{101}$ meters
- (c) $\sqrt{117}$ meters
- (d) $\sqrt{123}$ meters

4) The length of a rectangle is 18 units longer than its width. If its perimeter is 104 units, determine its area.

- (a) 685 square units
- (b) 630 square units
- (c) 595 square units
- (d) 575 square units

5) Two angles are supplementary. If the larger of the two is 40 degrees larger than the smaller, what is the measure of the smaller angle?

- (a) 40 degrees
- (b) 50 degrees



To get more Mathematics review materials, visit
<https://filipiknow.net/pma-reviewer/>

To God be the glory!

- (c) 60 degrees
- (d) 70 degrees

6) An equilateral triangle has a side of 6 cm. Determine its area.

- (a) $9\sqrt{3}$ cm²
- (b) $16\sqrt{3}$ cm²
- (c) $9\sqrt{2}$ cm²
- (d) $12\sqrt{2}$ cm²

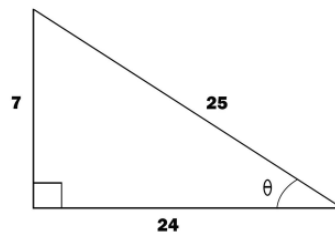
7) If x is an angle measurement in the first quadrant, what must be x in $\sin x = \frac{\sqrt{3}}{2}$?

- (a) 30 degrees
- (b) 45 degrees
- (c) 60 degrees
- (d) 90 degrees

8) Write $\frac{3\pi}{2}$ radians in degrees.

- (a) 180 degrees
- (b) 270 degrees
- (c) 360 degrees
- (d) 450 degrees

For item 9, refer to the figure below:



9) Which of the following is correct?



**PMA Mathematics
Reviewer Practice
Questions**

**Set 3:
Geometry and
Trigonometry**

- (a) $\csc \theta = 7/24$
- (b) $\sec \theta = 25/7$
- (c) $\tan \theta = 7/24$
- (d) $\sin \theta = 24/25$

10) If a right triangle has an interior acute angle θ such that $\sin \theta = \frac{10}{26}$, determine the perimeter of the right triangle.

- (a) 45 units
- (b) 60 units
- (c) 90 units
- (d) 105 units



To get more Mathematics review materials, visit <https://filipiknow.net/pma-reviewer/>

To God be the glory!