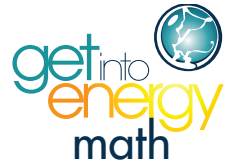


Name: _____ Date: _____



Get Into Energy Math
Quiz 17 Answer Key
Geometry

1. What polygon has opposite sides equal and parallel, and opposite angles equal but not 90 degrees?

- A. Rectangle
- B. Rhombus
- C. Trapezoid
- D. Parallelogram - Correct Answer**

2. What polygon has only two sides parallel and no sides equal?

- A. Parallelogram
- B. Rhombus
- C. Trapezoid - Correct Answer**
- D. Isosceles Trapezoid

3. What defines a polygon with four sides of any length?

- A. Triangle
- B. Quadrilateral - Correct Answer**
- C. Pentagon
- D. Square

4. What defines a polygon that has 4 equal angles and 2 sets of parallel sides? Not all sides are equal length.

- A. Rectangle - Correct Answer**
- B. Square
- C. Parallelogram
- D. Rhombus

5. What polygon has only two sides parallel, two sides equal, and two pairs of equal angles?

- A. Trapezoid
- B. Parallelogram
- C. Isosceles Trapezoid - Correct Answer**
- D. Triangle

6. What polygon has all sides equal, but not all interior angles equal, and also is a special form of a parallelogram?

- A. Square
- B. Trapezoid
- C. Rhombus - Correct Answer**
- D. Equilateral Triangle

7. Find the area of a rectangle whose length is 300 inches and width is 20 inches.

- A. 640 in^2
- B. 600 in^2
- C. $3,000 \text{ in}^2$
- D. $6,000 \text{ in}^2$ - Correct Answer**

8. Find the volume of a solid cone whose base radius is 10 inches and whose height is 9 inches.

- A. 942 in^3 - Correct Answer**
- B. 300 in^3
- C. $9,420 \text{ in}^3$
- D. 890 in^3

9. Find the perimeter of a rectangular swimming pool whose length is 40 feet and width is 30 feet.

A. 1,200 ft

B. 140 ft - Correct Answer

C. 120 ft

D. 160 ft

10. Find the volume of a prism whose bases are 9 square meters and height is 31 meters.

A. 40 m^3

B. 299 m^3

C. 279 m^3 - Correct Answer

D. $2,511 \text{ m}^3$

11. Find the perimeter of a triangle whose sides are 25 inches, 25 inches, and 52 inches.

A. 625 in

B. 75 in

C. 77 in

D. 102 in - Correct Answer

12. Find the volume of a cylinder whose radius is 5 decimeters and height is 8 decimeters.

A. 628 dm^3 - Correct Answer

B. 125.6 dm^3

C. 628 dm^2

D. 15.7 dm^2

13. Determine the area of a triangle with a base length of 18 feet and height of 25 feet.

A. 43 ft^2

B. 225 ft^2 - Correct Answer

C. $2,225 \text{ ft}^2$

D. 225 in^2

14. What solid geometric figure will have $\frac{1}{3}$ the volume of a cylinder if the base area and height are the same?

A. Sphere

B. Prism

C. Cone - Correct Answer

D. Cube

15. Find the volume of a sphere whose radius is 3 yards.

A. 13.23 yd^3

B. 28.26 yd^3

C. 36 yd^3

D. 113.04 yd^3 - Correct Answer

16. Find the area of a rhombus whose sides are each 40 meters and whose height is 30 meters.

A. $3,600 \text{ m}^2$

B. 160 m^2

C. $1,200 \text{ m}^2$ - Correct Answer

D. 140 m^2

17. Find the surface area of a sphere whose radius is 10 inches.

A. 314 in^2

B. $1,256 \text{ in}^2$ - Correct Answer

C. 400 in^2

D. 133.3 in^2

18. Determine the volume of a cuboid whose sides measure 14 centimeters, 20 centimeters, and 3 centimeters.

A. 840 cm^3 - Correct Answer

B. 74 cm^3

C. 560 cm^3

D. 820 cm^3

19. Determine the perimeter of a parallelogram that has a base length of 35 inches and a side length of 25 inches.

A. 60 in

B. 120 in - Correct Answer

C. 144 in

D. 825 in

20. Find the area of a circle whose radius is 100 millimeters.

A. 314 mm^2

B. $31,400 \text{ mm}^2$ - Correct Answer

C. $314,000 \text{ mm}^2$

D. $10,000 \text{ mm}^2$

21. Find the area of a trapezoid whose base lengths are 50 centimeters and 70 centimeters and whose height is 30 centimeters.

- A. 1,750 cm²
- B. 240 cm²
- C. 1,800 cm² - Correct Answer**
- D. 105,000 cm²

22. Find the circumference of a circle whose radius is 4 inches.

- A. 6.28 in
- B. 50.24 in
- C. 16 in
- D. 25.12 in - Correct Answer**

23. Find the perimeter of an isosceles trapezoid whose bases are 50 centimeters and 70 centimeters and sides are 45 centimeters.

- A. 165 cm
- B. 210 cm - Correct Answer**
- C. 157,500 cm
- D. 215 cm

24. Find the area of an ellipse whose major axis is 100 feet and minor axis is 50 feet.

- A. 5,000 ft²
- B. 15,708 ft²
- C. 3,927 ft² - Correct Answer**
- D. 17,671 ft²

25. Find the minor axis of an ellipse whose area is 15,700 square meters and major axis is 200 meters.

A. 50 m

B. 200 m

C. 100 m - Correct Answer

D. 50 ft