MATH TIMED DRILL #3 (7 minutes)

12. What is the area of a semicircle with a diameter of 2?

F) π

G) $\frac{\pi}{2}$

H) $\frac{\pi}{4}$

J) 2π

K) 1

6. For a function *f, f(-1) = 12* and *f(1) = 16*. If the graph of *y = f(x)* is a line in the xy-plane, what is the slope of the line?

A) $\frac{1}{4}$

B) $\frac{1}{4}$

C) $\frac{1}{3}$

D) 2

E) 4

12. Two circles have radii in the ratio of 1:2. What is the ratio of the areas of the two circles?

F) 1:2

G) 1:4

H) 1:8

J) 2:1

K) 2:4

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$$h = 3a + 14.3$$

17. An arborist uses the model above to estimate the height *h* of a tree, in inches, terms of the tree's age *a*, in years, between the years 2018 - 2022. Based on the model, what is the estimated increase, in inches, of the tree's height each year?

A) 3

B) 4

C) 4.6

D) 9.5

E) 14.3

700, 1200, 1600, 2000, *a*

11. If the mean of the five numbers above is 1600, what is the value of *a*?

F) 1,800

G) 2,100

H) 2,400

J) 2,500

K) 3,200

$$T = 20n + 12$$

13. Diana will purchase tickets from a concert promoter to see her favorite band. The promoter charges a one-time processing fee to purchase the tickets. The equation above represents the total amount *T,* in dollars, Diana will pay for *n* tickets. What does 12 represent in the equation?

A) The amount of the service fee, in dollars

B) The price of one ticket, in dollars

C) The minimum number of tickets Diana must purchase

D) The total amount, in dollars, Diana will pay for one ticket

E) The total amount in dollars, Diana will pay for any number of tickets

END OF DRILL #3