2. Mother Chickadee brings in a worm every 3 hours and her baby bird eats 6 worms every day. To the nearest hundred, how many worms are stored by them each year?
(A) 600 (B) 700 (C) 800 (D) 900 (E) 1000

6. A rectangular photograph is placed in a frame that forms a border four inches wide on all sides of the photograph. The photograph measures 11 inches high and 17 inches wide. Find the area of the border, in square inches.
(A) 356 (B) 400 (C) 475 (D) 187 (E) 288

10. How many 5-digit numbers greater than 10000 are there that use the five digits of 20123?

(A) 24 (B) 48 (C) 120 (D) 72 (E) 12

11. The mean, median, and unique mode of the positive integers 1, 5, 6, 7, 7, 9, $x$ are all equal. What is the value of $x$?

(A) 7 (B) 6 (C) 11 (D) 14 (E) 12

14. In the BIG N, a middle school football conference, each team plays every other team exactly twice. If a total of 132 conference games were played during the 2012 season, how many teams were members of the BIG N conference?
(A) 11 (B) 12 (C) 8 (D) 9 (E) 10

15. The smallest positive integer that has 2 as a remainder when divided by 3, 4, 5, 6, 7, 8 lies between what numbers?
(A) 400 and 450 (B) 500 and 550 (C) 700 and 750 (D) 800 and 850 (E) 900 and 950

16. Each of the digits 4, 5, 6, 7, 8, and 9 is used only once to make two three-digit numbers so that they have the largest possible product. Which of the following could be the product?
(A) 645498 (B) 847240 (C) 843500 (D) 844200 (E) 809622

17. A square with an integer side length is cut into 19 squares, all of which have integer side length and at least 16 of which have area 1. What is the smallest possible value of the length of the side of the original square?
(A) 4 (B) 5 (C) 8 (D) 6 (E) 7

18. What is the smallest positive integer that is neither prime nor square and that has no prime factor less than 100?
(A) 10403 (B) 13133 (C) 10201 (D) 13139 (E) 31149

19. In a jar of red, green, and blue marbles, all but 16 are red marbles, all but 28 are green, and all but 34 are blue. How many marbles are in the jar?
(A) 26 (B) 28 (C) 39 (D) 40 (E) 5

20. What is the correct ordering of the three numbers $\frac{7}{13}$, $\frac{9}{17}$, and $\frac{15}{29}$, in increasing order?

(A) $\frac{15}{29}<\frac{7}{13}<\frac{9}{17}$ (B) $\frac{15}{29}<\frac{9}{17}<\frac{7}{13}$ (C) $\frac{7}{13}<\frac{9}{17}<\frac{15}{29}$ (D) $\frac{9}{17}<\frac{15}{29}<\frac{7}{13}$
(E) $\frac{9}{17}<\frac{7}{13}<\frac{15}{29}$

21. Mark has a large white cube that has an edge of 20 feet. He also has enough red paint to cover 1800 square feet. Mark uses all the paint to create a white circle centered on each face, surrounded by a red border. Find the area of one of the white circles, in square feet.
(A) $200\sqrt{2}$ (B) $200\pi$ (C) $100\sqrt{2}$ (D) 100 (E) $100\pi$

22. Let $R$ be a set of nine distinct integers. Six of the elements of the set are 5, 6, 7, 9, 12, and 17. What is the number of possible values of the median of $R$?

(A) 4 (B) 5 (C) 6 (D) 7 (E) 8

23. An equilateral triangle and a regular hexagon have equal areas. If the perimeter of the hexagon is 12, what is the perimeter of the equilateral triangle?
(A) 6 (B) 5 (C) $6\sqrt{6}$ (D) $6\sqrt{3}$ (E) $3\sqrt{6}$

24. A circle of radius 5 is cut into four congruent arcs. The four arcs are joined to form the star figure shown. Find the ratio of the area of the star figure to the area of the original circle.

(A) $\frac{4}{\pi}-1$ (B) $\frac{\pi-1}{\pi}$ (C) $\frac{1}{\pi}$ (D) $\frac{\sqrt{3}}{\pi}$ (E) $\frac{4}{\pi}$