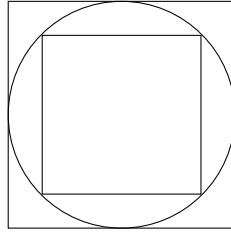


14. What fraction of the total area of the large square is outside of the small square?



- (A) $\frac{1}{6}$ (B) $\frac{1}{4}$ (C) $\frac{1}{3}$ (D) $\frac{1}{2}$ (E) $\frac{2}{3}$
-

15. The even positive integers are multiplied together, as in $2 \times 4 \times 6 \times \cdots \times n$, where n is some even integer. What is the smallest value of n for which this product is divisible by 2016?

- (A) 12 (B) 14 (C) 18 (D) 24 (E) 28
-

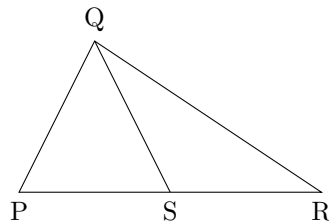
16. A total of 29 students in a class answered a survey about sports. Of these students there are 15 students who play soccer, 10 students who play hockey, and 12 students that play neither of these sports. How many of the students surveyed play both soccer and hockey?

- (A) 3 (B) 5 (C) 6 (D) 8 (E) 9
-

17. A car travels from one town to another at an average speed of 60 kilometres per hour and then returns along the same road at an average speed of 30 kilometres per hour. What is the average speed in kilometres per hour that the car travels over the entire trip?

- (A) 40 (B) 42 (C) 45 (D) 48 (E) 50
-

18. The lengths of PS, SR, and QS are equal. If angle SRQ measures x° , what is the measure (in degrees) of angle PQR?

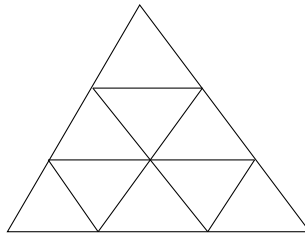


- (A) $180 - x$ (B) $180 - 2x$ (C) $2x$ (D) $3x$ (E) 90
-

19. In the sequence 2016, 2013, 2005, 2002, 1994, 1991, ..., every number except for 2016 and 2013 is 11 less than some other number in this sequence. Which of these numbers will appear in the sequence?

(A) 1 (B) 2 (C) 3 (D) 5 (E) 8

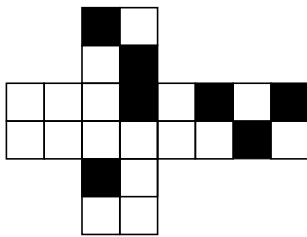
20. The large equilateral triangle below is broken into 9 smaller equilateral triangles, as shown. How many parallelograms appear in the diagram?



(A) 8 (B) 10 (C) 12 (D) 13 (E) 15

Part C

21. Which of the cubes shown could be made from this net?



(A) (B) (C) (D) (E)
