Game 1. Which of the possible divisors is the greatest that divides all numbers? Answer A, B, C or D.

Numbers

840   525   630   735

Possible divisors

A) 105

B) 133

C) 91

D) 7

Game 2. Which of the following sports is the odd one? Answer A, B, C, D.

Possible answers are:

A) Tennis

B) Basketball

C) Golf

D) Cycling

Game 3. How many line segments in total are in the figures below? A line segment is a line between two points with no crossing lines.

Game 4. What number multiplied by 7 equals 231?

$$x * 7 = 231$$

Game 5. Given the relationship between the two words below, which word has the same relationship to 'dislike'? Answer A, B, C, D.

Words: talk / yell

Possible answers are:

A) Ostentation

B) Shame

C) Offensive

D) Repugnance

Game 6. 2992 is a palindromic year as 3003 is, a gap of 11 years. What are the next two consecutive palindromic years after 3003 with the same gap?

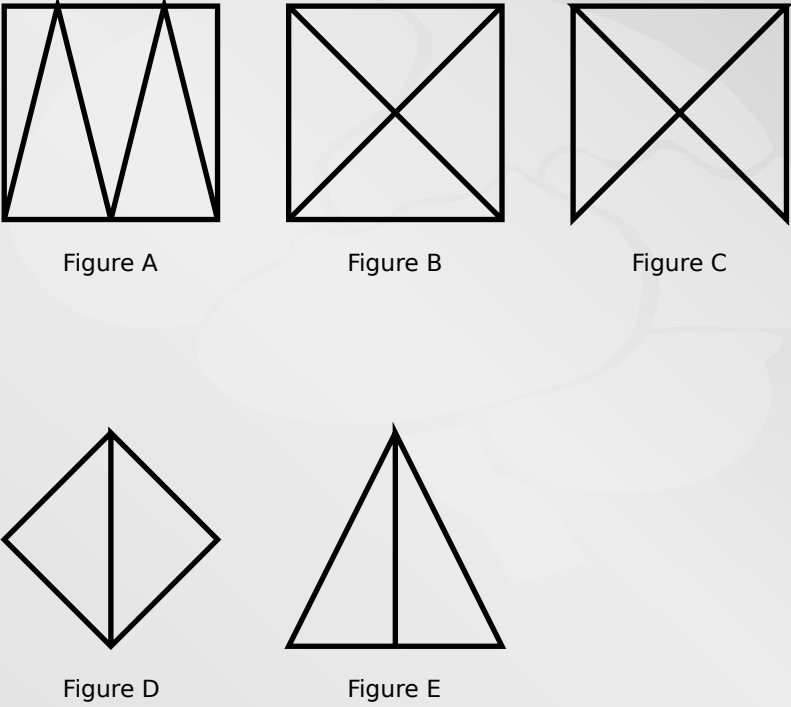Game 7. Which operators make 511, 369, and 990 equal 1870? Answer using '+-/*'.
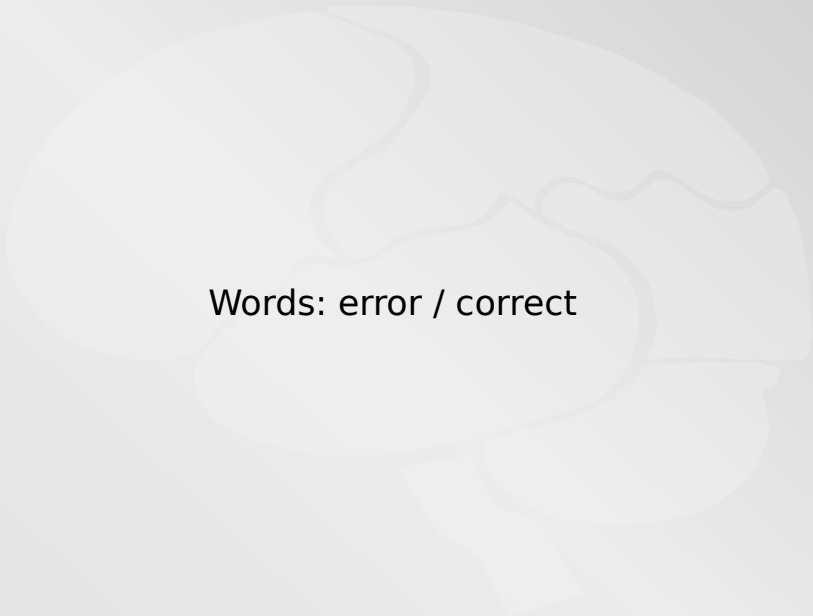
511
?
369
?
990
_____
1870

Game 8. Which of the following figures cannot be drawn without crossing any previous lines nor lifting the pencil? Answer A, B, C, D or E.

Figure A   Figure B   Figure C

Figure D   Figure E

Game 9. Given the relationship between the two words below, which word has the same relationship to 'damage'?

Words: error / correct

Game 10. Which of the following numbers is a prime? A prime number is a positive integer that has exactly two different positive divisors, 1 and itself. Answer A, B, C or D.
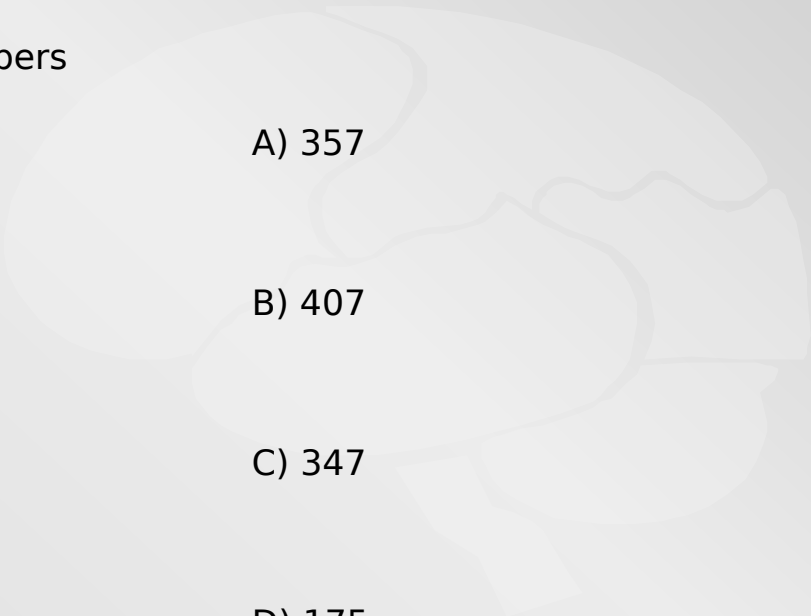
Numbers

A) 357

B) 407

C) 347

D) 175

Solutions

Game 1. The correct answer is 105.

Game 2. The correct answer is D. It is the only one that does not use a ball in the game.

Game 3. The correct answer is 72. There are 33 lines in the figure to the left and 39 in the figure to the right.

Game 4. The correct answer is 33. It is the result of the operation 231 / 7.

Game 5. The correct answer is D.

Game 6. The correct answer is 3993 and 4004. From year 1000 to year 10000, palindrome years occur at 110 year intervals except for the end of each millennium that occur at a 11 years interval.

Game 7. The correct answer is + and +.

Game 8. The correct answer is B.

Game 9. Possible correct answers are: repair, fix.

Game 10. The correct answer is 347. The number 347 is a primer number.