What Did Ignatz Say About Her Brain Surgeon?

Do any exercise below. Find your answer in the answer column and notice the letter next to it. Each time the exercise number appears in the code, write this letter above it. Keep working and you will answer the question.

$d = rt$ where d is the distance traveled by an object moving at speed r in time t. Find d if:

① $r = 40, t = 8$ ② $r = 55, t = 4$

$I = prt$ where I is the interest on an amount p, borrowed (or invested) at interest rate r for time t. Find I if:

③ $p = 1000, r = 0.06, t = 1$ ④ $p = 500, r = 0.14, t = 3$

$P = 2\ell + 2w$ where P is the perimeter of a rectangle with length ℓ and width w. Find P if:

⑤ $\ell = 7, w = 3$ ⑥ $\ell = 12, w = 3.5$

$d = \frac{1}{2} n(n - 3)$ where d is the number of diagonals of a polygon wih n sides. Find d if:

⑦ $n = 6$ ⑧ $n = 20$

$A = \frac{1}{2} a(b_1 + b_2)$ where A is the area of a trapezoid with altitude of length a, and bases of lengths b_1 and b_2. Find A if:

⑨ $a = 4, b_1 = 9, b_2 = 7$ ⑩ $a = 3, b_1 = 7.5, b_2 = 2.5$

$s = 16t^2$ where s is the distance (feet) a free-falling object travels in time t (seconds). Find s if:

⑪ $t = 3$ ⑫ $t = 20$

$w = 0.03\, e^3$ where w is the approximate weight (pounds) of an ice cube with edge of length e (inches). Find w if:

⑬ $e = 2$ ⑭ $e = 8$

$d = s + 0.05\, s^2$ where d is the approximate braking distance (feet) on dry pavement of a car traveling at speed s (miles per hour). Find d if:

⑮ $s = 30$ ⑯ $s = 60$

Ⓕ 31
Ⓞ 60
Ⓐ 6400
Ⓡ 32
Ⓢ 275
Ⓗ 320
Ⓟ 15.36
Ⓓ 144
Ⓜ 240
Ⓥ 9
Ⓖ 0.24
Ⓣ 84
Ⓔ 220
Ⓛ 170
Ⓨ 210
Ⓘ 75
Ⓝ 20
Ⓤ 0.38
Ⓒ 15
Ⓑ 6120

15-9-2-12-8-8-4-13-12-7-2-1-15-16-12-14-15-2-10-2-3-6-16-4-16-15-5-11