



MATH PROBLEMS

1. In 1993 Tony Gwynn had 489 at bats (AB) and hit .358. How many hits did he have?
 2. Between 1993 and 1997, Tony Gwynn hit .368! If Gwynn had 916 hits between 1993-1997, how many AB did he have?
 3. In Tony Gwynn's career he had 9288 AB and hit .338 for his career batting average. How many hits did he have in his career?
 4. With 9288 AB, how many hits would you need to have a career batting average of .300?
 5. If Tony Gwynn had 4 AB in every game, how many games could Gwynn go hitless in order to hit .300?
 6. Tony Gwynn hit 135 home runs (HR) in his career with 9288 AB. What's his HR percentage?
 7. Tony Gwynn had 543 doubles and 85 triples in 9288 AB. What percentage of his career AB were doubles or triples?
 8. What percentage of Tony Gwynn's hits were extra base hits in his career?
 9. How many singles did Gwynn have in his career?
 10. Tony Gwynn had 1138 RBI in his career and played 20 seasons. How many RBI did he average a season?
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MATH ANSWERS

1. 175 Hits

$$\text{hits} / 489 \text{ AB} = .358; 489 \times .358 = 175$$

2. 2489 AB

$$916 \text{ hits} / \text{AB} = .368 \text{ BA}; 916 = .368x; 916 \text{ hits} / .368 \text{ BA} = 2489$$

3. 3141 Hits

$$x / 9288 = .33817; 9288 \times .33817 = 3141$$

4. 2786 Hits

$$x / 9288 \text{ AB} = .300 \text{ BA}; 9288 \times .300x = 2786$$

5. 295 Games

$3141 \text{ hits} / (9288 \text{ AB} + 4x) = .300$ – solve for x so multiply both sides by $(9288 + 4x)$; $3141 = .300(9288 + 4x)$; divide each side by $.300$ so $(3141 / .300) = (9288 + 4x)$; subtract each side by 9288 so $(10471 - 9288) = 4x$; $(1182 / 4) = 295$

6. 1.45%

$$135 / 9288 = .0145 \times 100 = 1.45\% \text{ of AB were home runs!}$$

7. 6.76%

$$543 \text{ Doubles} + 85 \text{ Triples} = 628; 628 / 9288 \text{ AB} = .0676 \times 100 = 6.76\% \text{ of his AB were doubles or triples!}$$

8. 24.3%

$$\text{AB} = 9288, \text{ Total Hits} = 3141, \text{ HR} = 135, 2\text{B} = 543, 3\text{B} = 85$$

$$763 (\text{HR} + 2\text{B} + 3\text{B}) / 3141 \text{ Total Hits} = .2429 \times 100 = 24.3\% \text{ of his hits were extra base hits!}$$

9. 2378 Singles

$$3141 \text{ total hits} - 763 (\text{HR} + 2\text{B} + 3\text{B}) = 2378$$

10. 56.9

$$1138 \text{ RBI} / 20 \text{ seasons} = 56.9$$