

The aspect ratio of a rectangular shape is its length (L) divided by its width (W). It is expressed as L:W or L/W

20. (MAMDMN1) The dimensions of a desk are 25in long and 20in wide. What is the aspect ratio of the desk?  $25:20$

21. (MAMDMN1) Find the area of a television screen (25 in screen diagonal) whose screen also has an aspect ratio of 4:3. (Answer will be in square inches)

Handwritten work for Q21:  $(4x)^2 + (3x)^2 = 25^2$ ,  $16x^2 + 9x^2 = 625$ ,  $25x^2 = 625$ ,  $x^2 = 25$ ,  $x = 5$ . Then  $4(5) = 20$ ,  $3(5) = 15$ . The area is  $20 \times 15 = 300 \text{ in}^2$ .

22. (MAMDMN1) What is the check digit for the mastercard number 5424 9813 2720 008\_?  
 A. 3      B. 6  
 C. 2      D. Not Possible

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Use the following for #23-25.

System 1	System 2
Test Average- 50%	Test Average- 70%
Final Exam Grade- 25%	Final Exam Grade- 20%
Homework- 15%	Homework- 5%
Class Participation- 10%	Class Participation- 10%

- Test Average- 85
- Final Exam Grade- 72
- Homework - 92
- Class Participation- 95

Handwritten calculations for Q23:

<u>1</u>	<u>2</u>
42.5	59.5
18	14.4
13.8	4.6
+ 9.5	+ 9.5
<u>83.8</u>	<u>88</u>

23. (MAMDMN1) Below are your values. Which grading system gives you the greatest average?

- A. System 1
- B. System 2
- C. Both are equal
- D. None of the above

25. (MAMDMN1) Which set of singles, doubles, triples, and home runs would be greater than the slugging average of .500 if you have 400 at-bats? Answers are in order (singles, doubles, triples, and homeruns)

- A. 80, 20, 10, 10
- B. 90, 10, 6, 14
- C. 20, 40, 4, 56  $\rightarrow 20 + 80 + 12 + 224 = \frac{336}{400} = .840$
- D. 96, 6, 10, 8
- E. Not here

26. (MAMDMD2) Here are the annual numbers of deaths from tornadoes in the United States from 1990 through 2000.

Handwritten data for Q26: ~~53~~ ~~39~~ ~~39~~ ~~33~~ ~~69~~ ~~30~~ ~~25~~ ~~67~~ ~~130~~ ~~94~~ ~~40~~  
 25, 30, 33, 39, 39, 40, 53, 67, 69, 94, 130

What is the mean of this data?

$619 / 11 = 56.27$

27. (MAMDMD2) The middle value in a data set is called the:

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