

SAT-Like Math Questions

Topic: Reading Tables

Calculator NOT Permitted

Easy:

Ed's Discount Paints is having a sale on their three most popular colors and paint types. The table below shows the number of purchases made for each category:

	Dove Gray	Cyan Blue	Captivating Cream	Total
Matte	25	96	31	152
Eggshell	34	57	20	111
Satin	10	22	5	37
Total	69	175	56	300

1.) How many purchases were there of the following?

Satin Captivating Cream: _____

Matte Cyan Blue: _____

Dove Gray: _____

Eggshell: _____

2.) Of the gallons sold that were cyan blue, what proportion were in a matte finish?

A. $\frac{96}{300}$

B. $\frac{96}{152}$

C. $\frac{152}{175}$

D. $\frac{96}{175}$

3.) Of the gallons sold that were in an eggshell finish, what proportion were dove gray?

A. $\frac{111}{300}$

B. $\frac{69}{300}$

C. $\frac{34}{69}$

D. $\frac{34}{111}$

4.) Of the gallons sold that were captivating cream, what proportion were not in a satin finish?

- A. $\frac{51}{56}$
- B. $\frac{51}{300}$
- C. $\frac{5}{56}$
- D. $\frac{37}{56}$

Medium:

Questions 5-7 are based on the following:

In a group of 100 people, 58 are women and 42 are men. Furthermore, 10 are left handed and 90 are right handed.

	Left Handed	Right Handed	
Women			58
Men			42
	10	90	100

5.) If there are 3 left handed women in the group, how many right handed men are there?

- A. 7
- B. 35
- C. 55
- D. 97

6.) If 60% of the right handed people are women, what percent of the left handed people are men?

- A. 14%
- B. 40%
- C. 42%
- D. 60%

7.) If a person is selected randomly from this group, what is the probably that he will be a man?

- A. 0.10
- B. 0.42
- C. 0.58
- D. 0.90

Hard:

Questions 8 and 9 are based on the following:

Barbara asked 500 high school freshmen some questions about their math classes. She took note that all respondents who took math took either algebra, geometry, or both. Her results are shown in the table below:

	YES	NO
Did you take a math class this year?	453	47
If you took a math class, did you take algebra?	273	180
If you took a math class, did you take geometry?	233	220

8.) After looking at her results, Barbara wondered how many freshmen took both algebra and geometry. Is it possible for her to tell from the data that she collected?

- A. Yes, 40 freshmen took both algebra and geometry.
- B. Yes, 47 freshmen took both algebra and geometry.
- C. Yes, 53 freshmen took both algebra and geometry.
- D. There is not enough information to be sure.

9.) Out of all the freshman that Barbara talked to, how many took geometry but NOT algebra?

- A. 47
- B. 53
- C. 180
- D. 220

Questions 10 and 11 are based on the following:

Marcell is teaching a class of 50 students at an international university. He wonders what languages his students speak at home, so on the first day of class, he asks his students the following questions:

	YES	NO
Do you speak English at home?	18	32
Do you speak Mandarin at home?	35	15
Do you speak a language other than English or Mandarin at home?	7	43
If you speak a language other than English or Mandarin at home, do you also speak either English or Mandarin at home?	5	2

10.) After looking at his results, Marcell wondered how many students spoke both English and Mandarin in their homes. Can this be determined from his data?

- A. Yes, 3 students speak both English and Mandarin at home.
- B. Yes, 5 students speak both English and Mandarin at home.
- C. Yes, 7 students speak both English and Mandarin at home.
- D. There is not enough information to be sure.

11.) Suppose Marcell knows that there are exactly three students in his class who speak not only English and Mandarin, but also a third language in their homes. Furthermore, no student speaks more than one language in addition to English or Mandarin. Given this information, how many of Marcell's students speak exactly two languages at home?

- A. 4
- B. 6
- C. 7
- D. 10

Answer Key:

1.) 5, 96, 69, 111

2.) D

3.) D

4.) A

5.) B

6.) D

7.) B

8.) C

9.) 180

10.) B

11.) A



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