



PCAT-SECTION3^{Q&As}

Pharmacy College Admission Test - Quantitative

Pass PCAT PCAT-SECTION3 Exam with 100% Guarantee

Free Download Real Questions & Answers **PDF** and **VCE** file from:

<https://www.pass4itsure.com/pcat-section3.html>

100% Passing Guarantee
100% Money Back Assurance

Following Questions and Answers are all new published by PCAT
Official Exam Center

-  **Instant Download** After Purchase
-  **100% Money Back** Guarantee
-  **365 Days** Free Update
-  **800,000+** Satisfied Customers



**QUESTION 1**

What is the slope of a line that passes through the points (5, 2) and (1, 3)?

- A. 1/3
- B. -1/3
- C. 3
- D. 5

Correct Answer: A

$$m = \frac{y_2 - y_1}{x_2 - x_1}$$

If the first point (5, 2) = (x₁, y₁) and the second point (1, 3) = (x₂, y₂), then substituting these coordinate values into the definition for the slope yields

$$m = \frac{3 - 2}{1 - 5} = \frac{1}{-4}$$

QUESTION 2

What is the equation of a line that passes through the point (3, 1) and has a slope of -2/3?

A. $y = -\frac{2}{3}x$ B. $y = -\frac{2}{3}x + 3$ C. $y = -\frac{2}{3}x - 3$ D. $y = \frac{2}{3}x - 3$

- A. Option A
- B. Option B
- C. Option C
- D. Option D

Correct Answer: C

You can use the information provided by the specific point and the value of the slope to derive the equation for the line:



$$m = \frac{y_2 - y_1}{x_2 - x_1}$$
$$-\frac{2}{3} = \frac{y_2 - (-1)}{x_2 - (-3)} = \frac{y_2 + 1}{x_2 + 3}$$

$$y_2 + 1 = -\frac{2}{3} \cdot (x_2 + 3)$$

$$y_2 + 1 = -\frac{2}{3}x_2 - \frac{2}{3}(3)$$

$$y_2 + 1 = -\frac{2}{3}x_2 - 2$$

$$y = -\frac{2}{3}x - 3$$

QUESTION 3

- A. -7
- B. 2
- C. 6
- D. 7

Correct Answer: D

QUESTION 4

What is the solution of the following system of equations? $x+y=4$ and $2x+6y=3$ A. Option A

A. $x = -\frac{27}{8}, y = \frac{5}{8}$ B. $x = \frac{27}{8}, y = -\frac{5}{8}$ C. $x = \frac{27}{8}, y = \frac{5}{8}$ D. $x = \frac{8}{27}, y = \frac{8}{5}$

- B. Option B
- C. Option C
- D. Option D

Correct Answer: C

**QUESTION 5**

$$(6x^2y^5z^3) \div (3x^2y^3z^6) =$$

A. $\frac{z^2}{2y^3}$

B. $\frac{y^2}{2z^3}$

C. $\frac{2y^2}{z^3}$

D. $\frac{2z^2}{y^3}$

A. Option A

B. Option B

C. Option C

D. Option D

Correct Answer: C

$$x^2 \frac{x^2 + x - 42}{x + 7} = 1$$

QUESTION 6

Express in scientific notation: 13.9

A. 1.39×10^1 B. 1.39×10^1 C. 13.9×10^1 D. 13.9×10^1

Correct Answer: B

In scientific notation, the number 13.9 is 1.39×10^1 .

QUESTION 7

What is the slope of a line that passes through the points (3, 3) and (3, 3)?

A. 3

B. -3



C. 0

D. undefined

Correct Answer: C

The slope of a line that passes through the points (3, 3) and (3, 3) can be found by:

$$m = \frac{y_2 - y_1}{x_2 - x_1} = \frac{3 - 3}{3 - (-3)} = \frac{0}{6} = 0.$$

QUESTION 8

Upon rolling a pair of dice, what is the probability that the sum of the two numbers on the dice is either 7 or 12?

A. 1/6

B. 1/36

C. 5/36

D. 7/36

Correct Answer: D

QUESTION 9

Evaluate the following derivative: A. Option A

$$\frac{d}{dx} \left(\frac{15}{3x^8} \right)$$

A. $-\frac{40}{x^9}$

B. $\frac{40}{x^9}$

C. $-\frac{40}{x^{-9}}$

D. $\frac{40}{x^{-9}}$

B. Option B

C. Option C

D. Option D

Correct Answer: A

**QUESTION 10**

The ratio of boys to girls in the graduating class of a school is 3:2. If there are a total of 430 students in the class, how many girls are in the graduating class?

- A. 74
- B. 86
- C. 172
- D. 215

Correct Answer: C

To find the total number of girls in the science class, we must first find the fraction of students in the class who are girls. For every set of 5 students, 2 students are girls, yielding a fraction of $\frac{2}{5}$. Thus, the total number of girls in the class is



$$\frac{2}{5} \times 430 = 172.$$

**QUESTION 11**

What is the probability that two cards drawn from a deck of cards are of a black suit (e.g., either clubs or spades) if the first card drawn is replaced before the second card is drawn?

- A. 1352/2704
- B. 676/2704
- C. 6/2704
- D. 2/2704

Correct Answer: B

Because the two drawings are made from a complete deck of cards, the two events are independent of one another. You first need to determine the probability of drawing a card of two suits from a deck of cards. Out of a total of 52 cards, there are 13 cards of any suit and 26 cards of a black suit. The probability of drawing a card of a black suit, $P(A)$, is $26/52$. Because the first card is replaced before the second drawing, the probability of drawing a card of the same suit, $P(B)$, is also $26/52$. Thus, the probability of drawing two cards of the same suit is

$$P(A \text{ and } B) = P(A) \cdot P(B) = \frac{26}{52} \cdot \frac{26}{52} = \frac{676}{2704}$$

QUESTION 12

A full-time employee works 40 hours during a five-day week. The percentage of a five-day week that the employee is at work is:

- A. 20%
- B. 33%
- C. 40%
- D. 50%

Correct Answer: B

QUESTION 13

What is the range of the data set?

- A. 3.7mL
- B. 4.5mL



C. 5.8mL

D. 9.8mL

Correct Answer: D

The range or the difference between the largest and smallest values in this data set is $12.2\text{mL} - 2.4\text{mL} = 9.8\text{mL}$.

QUESTION 14

Evaluate the following definite integral:

$$\int_2^4 (x^5 - 6x^3 + 8x + 2) dx$$

A. 110

B. 364

C. 148

D. 250

Correct Answer: B

You begin by solving the integral and then evaluating the result between the limits of 2 and 4.

$$\begin{aligned} \int_2^4 (x^5 - 6x^3 + 8x + 2) dx &= \left(\frac{x^6}{6} - \frac{6x^4}{4} + \frac{8x^2}{2} + 2x \right)_2^4 \\ &= \left(\frac{(4)^6}{6} - \frac{6(4)^4}{4} + \frac{8(4)^2}{2} + 2(4) \right) - \left(\frac{(2)^6}{6} - \frac{6(2)^4}{4} + \frac{8(2)^2}{2} + 2(2) \right) \\ &= \left(\frac{4096}{6} - \frac{1536}{4} + \frac{128}{2} + 8 \right) - \left(\frac{64}{6} - \frac{96}{4} + \frac{32}{2} + 4 \right) \\ &= \frac{4448}{12} - \frac{80}{12} = \frac{4368}{12} = 364. \end{aligned}$$

QUESTION 15

What is the probability of randomly selecting a ten card from a standard deck of cards?

A. 1/52



B. 1/13

C. 12/13

D. 51/12

Correct Answer: B

To determine the probability that a selected card is a ten, you should first note that a card can be selected from a deck in 52 different ways. Since there are four ten cards, one ten for each of the four suits, a ten can be drawn from the deck in 4 different ways. Thus, the probability that the selected card is a ten is:

$$p = \frac{s}{n} = \frac{4}{52} = \frac{1}{13}.$$

[PCAT-SECTION3 Practice Test](#)[PCAT-SECTION3 Study Guide](#)[PCAT-SECTION3 Braindumps](#)