International
DHA-Pharmacy-Technician
DHA Pharmacy Technician (PHTCH)

Latest Version: 6.0

Question: 1

Solve the following equation for x: 30x + 120 = 42x – 140. What is the result?

A. 16.333
B. 33.333
C. 21.666
D. 44.333

Answer: C

Explanation:

First, subtract 120 from both sides of the equations	30x + (120 – 120) = 42x + (-140 - 120)
Combine like terms	30x = 42x - 260
Subtract 42x from both sides of the equation	-42x + 30x = (42x – 42x) -260
Combine like terms	-12x = - 260
Multiply both sides by -1,	12x = 260
Divide both sides by 12	x = 260/12
Solve for x	x = 21.666

Question: 2

Add the following fractions. What is the result?
5/12 + 1/12 = ?

A. 1/4
B. 6/24
C. 1/2
D. 17/12

Answer: C

Explanation:
To solve the problem of adding the fractions 5/12 and 1/12, the process involves a simple step since the denominators in both fractions are the same.
When adding fractions that have the same denominator, the only thing you need to do is add the numerators together. The denominator will remain the same. In this case, both fractions have the denominator 12.
Specifically, you add the numerator of the first fraction (5) to the numerator of the second fraction (1), which gives you: 5 + 1 = 6. Therefore, the sum of the fractions is 6/12.
To simplify 6/12, you divide both the numerator and the denominator by their greatest common divisor, which is 6. So, 6/12 simplifies to 1/2.

Hence, the result of adding 5/12 and 1/12 is 1/2.

Question: 3

There are 5 g of drug in a 50 mL solution. What is the percent of the solution?

A. 5%
B. 10%
C. 25%
D. 20%

Answer: B

Explanation:
To determine the percentage concentration of a solution, you can use the formula:

$$\text{Percentage} = \left(\frac{\text{Mass of solute (g)}}{\text{Volume of solution (mL)}} \right) \times 100$$

In this specific question, you are given a solution where the mass of the drug (solute) is 5 grams, and the volume of the solution is 50 mL. Applying the formula:

$$\text{Percentage} = \left(\frac{5\ \text{g}}{50\ \text{mL}} \right) \times 100$$

This calculation simplifies to:

$$\text{Percentage} = \left(\frac{5}{50} \right) \times 100 = 0.1 \times 100 = 10\%$$

Thus, the drug makes up 10% of the solution by mass per volume. This means that for every 100 mL of this solution, there are 10 grams of the drug. The answer to the question is 10%. The explanation provided in the choices appears to be misleading by suggesting that you need 100 mL to find the percentage, which is incorrect. The percentage can be directly calculated from the given 50 mL solution using the formula provided.

Question: 4

What is the maximum number of times a Roman numeral may be repeated?

A. 2
B. 3
C. 4
D. 5

Answer: B

Explanation:
In Roman numerals, each symbol has a specific value, and the way these symbols are combined dictates the overall numerical value they represent. However, there are rules governing how often each numeral

can be repeated in succession. Generally, a Roman numeral may be repeated up to three times in a row. This rule helps ensure clarity and reduces ambiguity in the representation of numbers.
For example, the numeral "I" represents 1, and it can be written three times in a row to represent the number 3, as in "III". If we need to represent the number 4, instead of writing "IIII", which is not commonly accepted, we use "IV". This format, where a smaller numeral precedes a larger numeral, indicates that the smaller numeral should be subtracted from the larger one, thus "IV" represents 4. Similarly, the numeral "X" represents 10 and can be repeated three times to represent 30, as in "XXX". To represent 40, rather than using "XXXX", the numeral "XL" is used, where "L" stands for 50. Here again, the placement of a smaller numeral (X) before a larger one (L) indicates subtraction, making "XL" equal to 40.
This limitation in repetition also applies to other numerals like "C" (100) and "M" (1000). For instance, "CCC" represents 300, but for 400, "CD" is used instead of "CCCC". The numeral "M", representing 1000, can also be repeated up to three times to denote 3000. For numbers beyond that, other combinations or rules are applied, but direct repetition beyond three instances is not standard.
Adhering to these conventions not only maintains the consistency of numeral representation but also simplifies the process of reading and writing Roman numerals. By limiting numeral repetition and using subtractive combinations, Roman numerals become more compact and efficient in representing large numbers.

Question: 5

Which of the following indicates that a prescription is to be dispensed as needed, as in pain medication?

A. STAT
B. PRN
C. standing order
D. none of the above

Answer: B

Explanation:
The correct answer to the question "Which of the following indicates that a prescription is to be dispensed as needed, as in pain medication?" is PRN. Let's break down the terminology used in medical prescriptions to understand why this is the correct choice:
PRN: PRN is an abbreviation derived from the Latin phrase "pro re nata," which translates to "as the thing is needed." In medical terms, this indicates that the administration of medication is not scheduled at fixed intervals but rather administered as required by the patient's condition. This is commonly seen in the management of conditions that have episodic symptoms, such as pain or anxiety, where the patient takes the medication only when they experience symptoms.
STAT: The term STAT is another abbreviation from the Latin word "statim," meaning "immediately" or "instantly." This is used in urgent situations where the medication needs to be administered right away, typically in emergency scenarios. Unlike PRN, this does not relate to intermittent symptoms but is used for acute conditions requiring rapid response.
Standing Order: A standing order in the context of medical prescriptions refers to a pre-established protocol set up by a physician that authorizes the administration of specific medications to a patient at predetermined intervals without a direct order from a physician each time. This is useful for ongoing

treatments where the healthcare provider anticipates a regular need for medication, such as antibiotics or insulin.
Understanding these terms helps in ensuring that patients receive appropriate care based on the urgency and nature of their condition. PRN orders specifically help in managing symptoms that fluctuate in intensity and frequency, providing a flexible approach that enhances patient comfort and autonomy over their treatment. This is particularly relevant in the management of pain, where the need for medication may vary dramatically and unpredictably. Therefore, for pain medication that is to be used as and when needed, PRN is the appropriate prescription term.

Question: 6

Which of the following statements about Medicare and/or Medicaid is false?

A. Medicaid is managed by the states.
B. Individuals 65 years of age and older may be covered by Medicare.
C. Part D of Medicare provides prescription drug insurance.
D. Patients may not have both Medicaid and Medicare.

Answer: D

Explanation:
The question presented asks to identify which statement about Medicare and/or Medicaid is false. Let's analyze each statement provided and expand the explanation for better understanding:
Statement 1: Medicaid is managed by the states. This statement is true. Medicaid is a federal-state program that varies from state to state. It is managed at the state level, and each state has its own rules about eligibility and services. The federal government sets certain parameters for the program, but states have significant leeway to manage their own programs.
Statement 2: Patients may not have both Medicaid and Medicare. This statement is false. It is indeed possible for individuals to be "dual eligible," meaning they can be covered by both Medicaid and Medicare. This typically applies to low-income seniors and younger people with disabilities who qualify for both programs. Medicaid can cover some costs and services that Medicare does not, such as certain long-term care services and supports.
Statement 3: Individuals 65 years of age and older may be covered by Medicare. This statement is true. Medicare is primarily a federal health insurance program for people who are 65 years of age and older, though it also covers younger individuals with certain disabilities and diseases. Eligibility for Medicare is primarily age-based, starting at 65 years old.
Statement 4: Part D of Medicare provides prescription drug insurance. This statement is also true. Medicare Part D is the component of Medicare that provides outpatient prescription drug coverage. Part D is available to anyone who has Medicare, regardless of income, health status, or current prescription expenses. It is provided through private prescription drug plans that contract with the government.
To conclude, the false statement among those provided is: "Patients may not have both Medicaid and Medicare." As explained, it is indeed possible and not uncommon for individuals to be enrolled in both Medicaid and Medicare, particularly for those who meet the eligibility criteria for both programs.

Question: 7

Supplemental insurance policies provided through private insurance companies to help cover costs not reimbursed by Medicare are called:

A. Medicaid
B. HMO plans
C. Medigap plans
D. PPO plans

Answer: C

Explanation:
The correct answer to the question is "Medigap plans." Medigap plans are supplemental insurance policies designed to fill the "gaps" in original Medicare coverage. These gaps include costs like co-payments, coinsurance, and deductibles that are not covered by Medicare Part A (hospital insurance) and Medicare Part B (medical insurance).
Medigap plans are offered by private insurance companies. They help reduce the out-of-pocket healthcare costs for enrollees, which can be significant, especially for those who require frequent medical care or expensive treatments. These plans do not replace Medicare but work alongside it to enhance coverage.
It is important to note that Medigap plans differ from Medicaid, which is a separate federal and state program that helps with medical costs for some people with limited income and resources. Medicaid also offers benefits not normally covered by Medicare, like nursing home care and personal care services.
Furthermore, Medigap plans are distinct from HMO (Health Maintenance Organization) and PPO (Preferred Provider Organization) plans, which are types of Medicare Advantage Plans (Part C). Unlike Medigap, Medicare Advantage Plans are an alternative way to receive Medicare benefits and often include additional benefits like drug coverage, which Medigap plans do not cover.
In summary, Medigap plans are supplemental policies provided by private companies designed to cover additional costs that Medicare does not, helping to minimize the financial burden of healthcare for Medicare enrollees.

Question: 8

A physician requires 10 feet of tubing. Your tubing is measured in meters. How many meters of tubing are needed?

A. 34.8 m
B. 3.48 m
C. 3.048 m
D. 3.84 m

Answer: C

Explanation:

To convert a measurement from feet to meters, it is essential to know the conversion factor between these two units of measurement. In this case, the conversion factor is that 1 meter equals approximately 3.28 feet.
Given that the physician requires 10 feet of tubing and the conversion factor is 1 meter = 3.28 feet, you can calculate the necessary length in meters by dividing the number of feet by the number of feet per meter. This calculation is performed as follows:

$$\text{Length in meters} = \frac{\text{Length in feet}}{\text{Conversion factor}} = \frac{10 \text{ feet}}{3.28 \text{ feet per meter}} \approx 3.048 \text{ meters}$$

Thus, to meet the requirement of the physician, you would need approximately 3.048 meters of tubing. This conversion ensures that the length of tubing provided is equivalent to the requested 10 feet, adhering to the necessary precision for medical equipment and supplies.

Question: 9

In terms of chemotherapeutic agents, which of the following statements is least accurate?

A. Chemotherapeutic agents must be prepared in a biologic safety cabinet or vertical flow hood.
B. The preparer should wear a gown, goggles, and two pairs of gloves to protect him or her from possible contamination.
C. The technician should refer to DOT guidelines regarding the storage and handling of chemotherapeutic agents.
D. A 4 x 4 inch piece of gauze should be kept inside the hood in case of a spill.

Answer: C

Explanation:
In considering the accuracy of statements related to the handling and preparation of chemotherapeutic agents, it's crucial to understand the roles of various regulatory bodies and the specific guidelines they provide. Each statement in the question pertains to a different aspect of handling chemotherapeutic agents, ranging from preparation to protective measures and regulatory compliance.
The first statement regarding the need for chemotherapeutic agents to be prepared in a biologic safety cabinet or vertical flow hood is accurate. This practice is essential to ensure a sterile environment that protects both the medication and the healthcare provider from contamination. These hoods provide a controlled environment that minimizes the risk of airborne contamination, which is critical when dealing with potent and potentially dangerous substances like chemotherapeutic agents.
The second statement involves the wearing of protective gear such as a gown, goggles, and two pairs of gloves. This is also accurate and aligns with standard safety protocols in handling hazardous drugs. The double layer of gloves, protective gown, and goggles are necessary to protect the skin and eyes from splashes or accidental exposure to these potent drugs, which can be harmful upon direct contact.
Regarding the statement about keeping a 4 x 4 inch piece of gauze inside the hood in case of a spill, this too is practical and accurate. Spills of chemotherapeutic agents can be dangerous, and having absorbent materials like gauze readily available helps in quickly managing any accidental spills, thereby reducing exposure and maintaining a clean work environment.
The statement identified as the least accurate concerns the reference to the Department of Transportation (DOT) guidelines for the storage and handling of chemotherapeutic agents. This is indeed the least accurate because the DOT's regulations primarily focus on the transportation of hazardous materials, not on storage and handling within a healthcare facility. For guidelines on storage and

handling of chemotherapeutic agents, the appropriate reference would be the Occupational Safety and Health Administration (OSHA), which provides specific regulations aimed at ensuring the safety of healthcare workers when dealing with hazardous drugs in a medical setting. OSHA guidelines cover aspects such as proper storage, handling procedures, and personnel safety measures to minimize occupational exposure to dangerous chemicals.
Thus, the statement about referring to DOT guidelines for storage and handling of chemotherapeutic agents is the least accurate and should instead refer to OSHA guidelines. Understanding the correct source of regulatory guidelines is crucial for maintaining safety standards in healthcare settings, particularly when handling hazardous substances like chemotherapeutic agents.

Question: 10

Which of the following would NOT be an advantage of administering a medication in liquid form?

A. Faster onset of action compared with solid forms
B. Easier swallowing for patients with difficulty swallowing pills
C. Improved portability for carrying while traveling
D. Flexible dosing that allows dose adjustment for weight or age

Answer: C

Explanation:
Liquid formulations are generally less convenient to transport than solid dosage forms. They can be heavier, at greater risk of spilling or leaking, may require child-resistant caps, and sometimes need special storage (for example refrigeration or protection from light). These practical factors make improved portability not an advantage of liquids.
Why the other options are advantages:
Faster onset of action: Liquids do not need to disintegrate and dissolve like tablets, so the drug is often available for absorption sooner, producing a quicker onset.
Easier swallowing: Liquids are easier to swallow for children, elderly patients, or anyone with dysphagia, which improves adherence and safety when solids cannot be swallowed.
Flexible dosing: Liquid preparations allow dose titration and small dose adjustments based on weight, age, or clinical response, which is especially useful in pediatrics and geriatrics.
Additional note: Although liquids allow flexible dosing, they can be susceptible to measurement error if proper measuring devices (oral syringe, calibrated cup, or dropper) are not used; this is a practical consideration but does not make flexibility an advantage invalid.

Thank You for Trying Our Product

For More Information – Visit link below:

https://www.examsboost.com/

15 USD Discount Coupon Code:

G74JA8UF

FEATURES

- ✓ 90 Days Free Updates
- ✓ Money Back Pass Guarantee
- ✓ Instant Download or Email Attachment
- ✓ 24/7 Live Chat Support
- ✓ PDF file could be used at any Platform
- ✓ 50,000 Happy Customer