

PRACTICE EXAM 14 — WDI CATEGORY SIMULATION (50 QUESTIONS)

1. A label requires a 0.5% finished dilution. To prepare 200 gallons of finished solution, how much concentrate is needed?

- A. 1 gallon
- B. 2 gallons
- C. 5 gallons
- D. 10 gallons

2. A foundation has four walls measuring 35, 35, 25, and 25 feet. What is the total perimeter to be treated?

- A. 120 linear feet
- B. 60 linear feet
- C. 100 linear feet
- D. 1,225 linear feet

3. A label specifies 4 gallons of finished solution per 10 linear feet. How many gallons are needed for 200 linear feet?

- A. 8 gallons
- B. 20 gallons
- C. 40 gallons
- D. 80 gallons

4. A candidate scores 40 correct out of 50 on a practice exam. What percentage is this?

- A. 70%
- B. 80%
- C. 75%
- D. 85%

5. A label calls for 1 part concentrate to 99 parts water. What approximate percentage concentration does this represent?

- A. 1%
- B. 10%
- C. 0.1%
- D. 5%

6. A 50-question exam requires 70% to pass. How many questions may a candidate answer incorrectly and still pass?

- A. 5 questions
- B. 10 questions
- C. 15 questions
- D. 35 questions

7. A crawlspace floor measures 25 feet by 40 feet and must be fully covered by a vapor barrier. How many square feet are required?

- A. 65 square feet
- B. 130 square feet
- C. 1,000 square feet
- D. 100 square feet

8. A label requires 4 gallons per 10 linear feet, and a wall is 80 feet long. How many gallons are needed for that wall?

- A. 8 gallons
- B. 16 gallons
- C. 80 gallons
- D. 32 gallons

9. Three pesticides have LD50 values of 50, 500, and 5,000 mg/kg. Which is the most toxic?

- A. The one with an LD50 of 500
- B. The one with an LD50 of 50
- C. The one with an LD50 of 5,000
- D. They are all equally toxic

10. A label requires 1 gallon of concentrate per 100 gallons of finished solution. For a 400-gallon tank, how much concentrate is needed?

- A. 4 gallons
- B. 1 gallon
- C. 40 gallons
- D. 400 gallons

11. A continuing-education cycle requires 15 credits over 3 years. How many credits per year keeps a licensee on track?

- A. 15 credits per year
- B. 3 credits per year
- C. 10 credits per year

D. 5 credits per year

12. A candidate needs exactly 70% on a 50-question exam. How many correct answers does that require?

A. 30 correct

B. 40 correct

C. 45 correct

D. 35 correct

13. A label requires 2 gallons of finished solution per linear foot for a deep trench. For a 30-foot section, how many gallons are needed?

A. 15 gallons

B. 32 gallons

C. 60 gallons

D. 30 gallons

14. A 200-gallon tank is filled with finished solution at a rate of 4 gallons per 10 linear feet. Approximately how many linear feet can it treat?

A. 500 linear feet

B. 200 linear feet

C. 80 linear feet

D. 50 linear feet

15. A label specifies a 0.06% finished concentration. Which statement about this dilution is correct?

A. It uses more concentrate than a 0.5% mixture

- B. It means 6 parts concentrate per 100 parts solution
- C. It cannot be measured with standard equipment
- D. It is far more dilute than a 1% mixture

16. A perimeter measures 150 linear feet, and the label requires 4 gallons per 10 linear feet. How much finished solution is needed?

- A. 15 gallons
- B. 60 gallons
- C. 150 gallons
- D. 600 gallons

17. Of three products labeled CAUTION, WARNING, and DANGER, which is the least acutely toxic?

- A. The DANGER product
- B. The CAUTION product
- C. The WARNING product
- D. They are equal in toxicity

18. A label requires 1 gallon of concentrate per 50 gallons of finished solution. For 100 gallons of finished solution, how much concentrate is needed?

- A. 1 gallon
- B. 1.5 gallons
- C. 2 gallons
- D. 50 gallons

19. A candidate answers 34 of 50 questions correctly on an exam requiring 70%. What is the result?

- A. Pass, because 34 exceeds the threshold
- B. Pass, because any score over half passes
- C. Fail, because 45 correct are required
- D. Fail, because 35 correct are required to reach 70%

20. A slab measures 50 feet by 30 feet. What is its perimeter?

- A. 80 linear feet
- B. 1,500 linear feet
- C. 100 linear feet
- D. 160 linear feet

21. A label requires 4 gallons per 10 linear feet, and the trench totals 90 linear feet. How many gallons are needed?

- A. 9 gallons
- B. 90 gallons
- C. 36 gallons
- D. 360 gallons

22. A 0.1% finished dilution corresponds to which parts ratio?

- A. 1 part per 10
- B. 1 part per 100
- C. 1 part per 1,000
- D. 1 part per 10,000

23. A candidate scores 45 of 50 correct. What percentage is this, and does it pass at 70%?

- A. 85%, passing
- B. 90%, passing
- C. 80%, passing
- D. 70%, exactly passing

24. A label requires 1 gallon of concentrate per 100 gallons of finished solution. To make 250 gallons, how much concentrate is needed?

- A. 1 gallon
- B. 2.5 gallons
- C. 25 gallons
- D. 250 gallons

25. Two products have LD50 values of 10 mg/kg and 2,000 mg/kg. Which statement is correct?

- A. The 2,000 mg/kg product is far more toxic
- B. Both products are equally toxic by definition
- C. LD50 has no relationship to toxicity
- D. The 10 mg/kg product is far more toxic

26. A label requires 3 gallons of finished solution per 10 linear feet. For a 100-foot perimeter, how many gallons are needed?

- A. 3 gallons
- B. 30 gallons
- C. 100 gallons
- D. 300 gallons

27. An applicator mixes 2 gallons of concentrate into enough water to make 200 gallons of finished solution. What is the approximate concentration?

- A. 1%
- B. 2%
- C. 0.5%
- D. 10%

28. A 50-question exam needs 70% to pass, and a candidate answers 38 correctly. What is the outcome?

- A. Fail, since 45 correct are required
- B. Fail, since 40 correct are required
- C. Pass, since 38 exceeds the 35 needed
- D. Pass, since any score over 30 passes

29. A label requires 4 gallons per 10 linear feet, and a tank holds 100 gallons of finished solution. Approximately how many linear feet can it treat?

- A. 100 linear feet
- B. 400 linear feet
- C. 250 linear feet
- D. 40 linear feet

30. A crawlspace measures 20 feet by 20 feet. How many square feet of vapor barrier are required to cover it?

- A. 40 square feet
- B. 400 square feet
- C. 80 square feet

D. 200 square feet

31. A label specifies 0.25% finished concentration. How much concentrate is in 100 gallons of finished solution?

A. 0.25 gallon

B. 2.5 gallons

C. 25 gallons

D. 0.025 gallon

32. Which signal word would correspond to a product with an LD50 indicating the lowest acute toxicity?

A. DANGER

B. WARNING

C. CAUTION

D. POISON

33. A label requires 5 gallons of finished solution per 10 linear feet. For 60 linear feet, how many gallons are needed?

A. 12 gallons

B. 30 gallons

C. 60 gallons

D. 300 gallons

34. A candidate must pass a 50-question exam at 70%. Which figure represents the minimum number of correct answers needed?

A. 30

- B. 25
- C. 45
- D. 35

35. A label requires 1 gallon of concentrate per 100 gallons. An applicator needs 500 gallons of finished solution. How much concentrate is required?

- A. 1 gallon
- B. 50 gallons
- C. 100 gallons
- D. 5 gallons

36. A 0.5% finished solution means concentrate makes up what fraction of the mixture?

- A. One half of one percent
- B. Five percent
- C. Fifty percent
- D. One percent

37. A trench measures 45 linear feet, and the label requires 4 gallons per 10 linear feet. How many gallons are needed?

- A. 4.5 gallons
- B. 18 gallons
- C. 45 gallons
- D. 180 gallons

38. Two products are labeled, one with an LD50 of 100 mg/kg carrying DANGER and one with an LD50 of 4,000 mg/kg carrying CAUTION. Which pairing is consistent?

- A. Lower LD50 with CAUTION; higher LD50 with DANGER
- B. Both LD50 values should carry the same signal word
- C. Lower LD50 (more toxic) with DANGER; higher LD50 (less toxic) with CAUTION
- D. LD50 values have no bearing on the signal word

39. A label requires 4 gallons per 10 linear feet, and the perimeter is 250 linear feet. How many gallons of finished solution are needed?

- A. 100 gallons
- B. 25 gallons
- C. 250 gallons
- D. 1,000 gallons

40. An applicator over-applies, using 6 gallons per 10 linear feet when the label maximum is 4. How should this be evaluated?

- A. A label violation, since the rate exceeds the maximum
- B. Acceptable, because more product ensures control
- C. Required, because higher rates are always safer
- D. Irrelevant, because the label rate is only a guideline

41. A 0.5% finished solution requires how much concentrate per 100 gallons?

- A. 5 gallons
- B. 50 gallons
- C. 0.05 gallon
- D. 0.5 gallon

42. A candidate answers 35 of 50 questions correctly on a 70% exam. What is the result?

- A. Pass, since 35 meets exactly the 70% threshold
- B. Fail, since 40 correct are required
- C. Fail, since 45 correct are required
- D. Pass, since any score over half passes

43. A label requires 2 gallons of finished solution per linear foot. For a 40-foot trench, how many gallons are needed?

- A. 20 gallons
- B. 42 gallons
- C. 40 gallons
- D. 80 gallons

44. A product's LD50 is reported as 5 mg/kg. Compared with a product at 5,000 mg/kg, the 5 mg/kg product is:

- A. Far less toxic, needing a larger dose
- B. Far more toxic, since a tiny dose is lethal
- C. Equal in toxicity to the other product
- D. Nontoxic regardless of the dose

45. A label requires 4 gallons per 10 linear feet, and a wall measures 120 feet. How many gallons are needed?

- A. 12 gallons
- B. 48 gallons
- C. 120 gallons
- D. 480 gallons

46. A candidate needs 70% of 50 questions. Which figure is the number that may be missed while still passing?

- A. 35
- B. 5
- C. 15
- D. 25

47. A 100-gallon tank is filled with finished solution at 1 gallon concentrate per 100 gallons. How much concentrate did it take?

- A. 0.5 gallon
- B. 1 gallon
- C. 10 gallons
- D. 100 gallons

48. A label requires 4 gallons per 10 linear feet. A 40-foot porch wall and a 60-foot side wall are both treated. How many total gallons are needed?

- A. 10 gallons
- B. 20 gallons
- C. 100 gallons
- D. 40 gallons

49. A 1% finished solution corresponds to which parts ratio?

- A. 1 part per 10
- B. 1 part per 1,000
- C. 1 part per 100

D. 1 part per 10,000

50. A label maximum is 4 gallons per 10 linear feet. An applicator applies exactly 4 gallons per 10 linear feet. How should this be evaluated?

A. Compliant, since it matches the labeled rate exactly

B. A violation, since any application is illegal

C. Insufficient, since the rate must always be doubled

D. Excessive, since the rate must always be halved

Practice Exam 14: Answer Key and Full Explanations

1. A — A 0.5% finished solution means 0.5% of 200 gallons, which is $0.005 \times 200 = 1$ gallon of concentrate. The percentage is the fraction of the finished volume that is concentrate. Accurate dilution ensures the label rate is met.

2. A — The total perimeter is the sum of the four walls: $35 + 35 + 25 + 25 = 120$ linear feet. Perimeter adds all sides along the foundation. This figure feeds the volume calculation.

3. D — At 4 gallons per 10 linear feet, 200 feet requires $4 \div 10 \times 200 = 80$ gallons. The rate scales proportionally with distance. Correct scaling ensures full coverage.

4. B — Scoring 40 of 50 equals $40 \div 50 \times 100 = 80\%$. Converting raw scores to percentages confirms performance. At 80%, the candidate is well above a 70% threshold.

5. A — One part concentrate to 99 parts water yields about 1% concentrate (1 in 100). The ratio converts directly to a percentage. Understanding this prevents dosing errors.

6. C — Passing at 70% requires 35 correct, so a candidate may miss at most $50 - 35 = 15$ questions. Missing 16 drops the score below 70%. Knowing the miss-limit aids exam strategy.

7. C — A 25-by-40-foot floor has an area of $25 \times 40 = 1,000$ square feet, the vapor barrier needed. Area is length times width. This sizes the moisture-control material correctly.

8. D — At 4 gallons per 10 linear feet, an 80-foot wall requires $4 \div 10 \times 80 = 32$ gallons. The rate scales with wall length. Accurate calculation ensures adequate coverage.

9. B — The most toxic product is the one with the lowest LD50, which is 50 mg/kg, because a smaller dose is lethal. The relationship is inverse. A smaller lethal dose means greater toxicity.

10. A — At 1 gallon of concentrate per 100 gallons, a 400-gallon tank requires $1 \div 100 \times 400 = 4$ gallons. The ratio scales with total finished volume. Accurate scaling achieves the labeled dilution.

11. D — Fifteen credits over three years averages $15 \div 3 = 5$ credits per year. Spreading the requirement evenly avoids a shortfall. Continuing education maintains certification regardless of application activity.

12. D — Exactly 70% of 50 questions is $0.70 \times 50 = 35$ correct answers. This is the minimum passing count. Falling to 34 means failing the threshold.

13. C — At 2 gallons per linear foot, a 30-foot section requires $2 \times 30 = 60$ gallons. The rate multiplies directly by the length. Deep-trench rates demand careful calculation.

14. A — A 200-gallon tank at 4 gallons per 10 linear feet treats $200 \div 0.4 = 500$ linear feet. Dividing total volume by the per-foot rate gives the treatable distance. This helps plan tank coverage.

15. D — A 0.06% finished concentration is far more dilute than a 1% mixture, using much less concentrate. It does not use more than a 0.5% mix, and it is readily measured. Recognizing the scale prevents mixing errors.

16. B — At 4 gallons per 10 linear feet, a 150-foot perimeter requires $4 \div 10 \times 150 = 60$ gallons. The rate scales with the perimeter. Correct calculation ensures complete coverage.

17. B — The CAUTION product is the least acutely toxic of the three, below WARNING and DANGER. The order CAUTION → WARNING → DANGER reflects increasing hazard. CAUTION marks slightly toxic products.

18. C — At 1 gallon of concentrate per 50 gallons, 100 gallons of finished solution requires $1 \div 50 \times 100 = 2$ gallons. The ratio scales with total volume. Accurate scaling achieves the labeled dilution.

19. D — With 34 correct, the candidate fails because 70% requires 35 correct ($0.70 \times 50 = 35$). Thirty-four falls one short. The passing line is exact, not approximate.

20. D — A 50-by-30-foot slab has a perimeter of $2 \times (50 + 30) = 160$ linear feet. Perimeter sums all four sides. This determines the trench length and solution volume.

21. C — At 4 gallons per 10 linear feet, 90 feet requires $4 \div 10 \times 90 = 36$ gallons. The rate scales proportionally with distance. Correct scaling ensures full coverage.

22. C — A 0.1% finished dilution equals one part concentrate per thousand parts solution ($0.1\% = 1/1000$). The percentage converts directly to a parts ratio. This prevents serious mixing errors.

23. B — Scoring 45 of 50 equals $45 \div 50 \times 100 = 90\%$, which passes at a 70% threshold. Converting to a percentage confirms the result. Ninety percent is well above passing.

24. B — At 1 gallon of concentrate per 100 gallons, 250 gallons requires $1 \div 100 \times 250 = 2.5$ gallons. The ratio scales with total finished volume. Accurate scaling achieves the labeled dilution.

25. D — The 10 mg/kg product is far more toxic, because a lower LD50 means a smaller dose is lethal. The relationship is inverse, and LD50 does relate to toxicity. A smaller lethal dose means greater toxicity.

26. B — At 3 gallons per 10 linear feet, a 100-foot perimeter requires $3 \div 10 \times 100 = 30$ gallons. The rate scales proportionally with distance. Correct calculation ensures coverage.

27. A — Mixing 2 gallons of concentrate into 200 gallons of finished solution yields $2 \div 200 \times 100 = 1\%$ concentration. The fraction of concentrate in the mixture defines the percentage. Accurate concentration matters for label compliance.

28. C — With 38 correct, the candidate passes because 38 exceeds the 35 needed ($0.70 \times 50 = 35$). Thirty-eight is comfortably above the threshold. The passing line is 35.

29. C — A 100-gallon tank at 4 gallons per 10 linear feet treats $100 \div 0.4 = 250$ linear feet. Dividing total volume by the per-foot rate gives the treatable distance. This helps plan tank coverage.

30. B — A 20-by-20-foot crawlspace has an area of $20 \times 20 = 400$ square feet of vapor barrier. Area is length times width. This sizes the material correctly.

31. A — A 0.25% finished concentration in 100 gallons is $0.0025 \times 100 = 0.25$ gallon of concentrate. The percentage is the fraction of finished volume that is concentrate. Accurate dilution meets the label rate.

32. C — A product with the lowest acute toxicity carries the signal word CAUTION. WARNING and DANGER mark progressively more toxic products, and POISON accompanies the most toxic. CAUTION corresponds to the highest LD50 (least toxic) products.

33. B — At 5 gallons per 10 linear feet, 60 feet requires $5 \div 10 \times 60 = 30$ gallons. The rate scales proportionally with distance. Correct calculation ensures coverage.

34. D — Seventy percent of 50 is 35, the minimum number of correct answers needed to pass. It is not 30, 25, or 45. Knowing the passing count guides exam strategy.

35. D — At 1 gallon of concentrate per 100 gallons, 500 gallons requires $1 \div 100 \times 500 = 5$ gallons. The ratio scales with total finished volume. Accurate scaling achieves the labeled dilution.

36. A — A 0.5% finished solution means concentrate makes up one half of one percent of the mixture. It is not five percent, fifty percent, or one percent. Reading the percentage correctly prevents dosing errors.

37. B — At 4 gallons per 10 linear feet, a 45-foot trench requires $4 \div 10 \times 45 = 18$ gallons. The rate scales proportionally with distance. Correct calculation ensures coverage.

38. C — The consistent pairing matches the lower LD50 (100 mg/kg, more toxic) with DANGER and the higher LD50 (4,000 mg/kg, less toxic) with CAUTION. LD50 and the signal word are linked through toxicity. A more toxic product carries the stronger signal word.

39. A — At 4 gallons per 10 linear feet, a 250-foot perimeter requires $4 \div 10 \times 250 = 100$ gallons. The rate scales proportionally with distance. Correct scaling ensures complete coverage.

40. A — Applying 6 gallons per 10 linear feet when the label maximum is 4 is a label violation, since exceeding the labeled rate is illegal. More product is neither safer nor required. The label rate is a legal ceiling.

41. D — A 0.5% finished solution requires $0.005 \times 100 = 0.5$ gallon of concentrate per 100 gallons. The percentage is the fraction of finished volume that is concentrate. Accurate dilution meets the label rate.

42. A — With 35 correct, the candidate passes because 35 meets exactly the 70% threshold ($0.70 \times 50 = 35$). Thirty-five is the minimum passing count. Meeting the threshold exactly is a pass.

43. D — At 2 gallons per linear foot, a 40-foot trench requires $2 \times 40 = 80$ gallons. The rate multiplies directly by the length. Deep-trench rates demand careful calculation.

44. B — A product with an LD50 of 5 mg/kg is far more toxic than one at 5,000 mg/kg, because a tiny dose is lethal. The relationship is inverse. A smaller lethal dose means greater toxicity.

45. B — At 4 gallons per 10 linear feet, a 120-foot wall requires $4 \div 10 \times 120 = 48$ gallons. The rate scales proportionally with wall length. Correct calculation ensures adequate coverage.

46. C — Seventy percent of 50 is 35 correct, so a candidate may miss $50 - 35 = 15$ and still pass. Fifteen is the maximum allowable misses. This differs from the 35 minimum correct.

47. B — A 100-gallon tank at 1 gallon of concentrate per 100 gallons took exactly 1 gallon of concentrate. The ratio scales directly with the total volume. Accurate scaling achieves the labeled dilution.

48. D — At 4 gallons per 10 linear feet, a 40-foot and a 60-foot wall total 100 feet, requiring $4 \div 10 \times 100 = 40$ gallons. The rate scales with the combined length. Correct calculation ensures both walls are covered.

49. C — A 1% finished solution corresponds to one part concentrate per hundred parts solution (1/100). The percentage converts directly to a parts ratio. This understanding prevents mixing errors.

50. A — Applying exactly 4 gallons per 10 linear feet when the label maximum is 4 is compliant, since it matches the labeled rate. Applying at the label rate is neither a violation nor insufficient nor excessive. Exact label compliance is correct practice.