

## WorkKeys <br> Form WKC



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## APPLIED MATHEMATICS

| Question Number | Category | Level | Answer |
| :---: | :---: | :---: | :---: |
| 1 | Single-Step Arithmetic | 3 | C |
| 2 | Single-Step Arithmetic | 3 | G |
| 3 | Single-Step Arithmetic | 3 | E |
| 4 | Single-Step Arithmetic | 3 | H |
| 5 | Single-Step Arithmetic | 3 | D |
| 6 | Area-Perimeter | 5 | K |
| 7 | Percent | 5 | D |
| 8 | Dimensional Analysis-Mixed Units | 5 | H |
| 9 | Dimensional Analysis-Mixed Units | 4 | E |
| 10 | Dimensional Analysis-Mixed Units | 4 | J |
| 11 | Average | 4 | C |
| 12 | Dimensional Analysis-Mixed Units | 4 | H |
| 13 | Dimensional Analysis-Mixed Units | 5 | E |
| 14 | Dimensional Analysis-Mixed Units | 4 | J |
| 15 | Average | 5 | A |
| 16 | Percent | 5 | J |
| 17 | Multi-Step Arithmetic | 5 | C |
| 18 | Multi-Step Arithmetic | 6 | H |
| 19 | Percent | 5 | E |
| 20 | Dimensional Analysis-Mixed Units | 6 | G |
| 21 | Best Deal | 6 | D |
| 22 | Best Deal | 5 | G |
| 23 | Area-Perimeter and Dimensional Analysis-Mixed Units | 6 | D |
| 24 | Percent | 6 | K |
| 25 | Volume | 7 | B |
| 26 | Area-Perimeter | 6 | H |
| 27 | Dimensional Analysis-Mixed Units | 6 | C |
| 28 | Best Deal | 6 | F |
| 29 | Area-Perimeter | 7 | B |
| 30 | Area-Perimeter | 7 | J |
| 31 | Dimensional Analysis-Mixed Units and Average | 6 | D |
| 32 | Dimensional Analysis-Mixed Units | 6 | G |
| 33 | Percent | 5 | C |

READING FOR INFORMATION

| Question Number | Passage Number | Number of Words | Flesch-Kincaid Readability Level | Category | Answer |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 1 | 1 | 96 | 3.9 | Sequence | A |
| 2 | 2 | 133 | 5.1 | Sequence | J |
| 3 | 3 | 81 | 3.8 | Explicit Detail | A |
| 4 |  |  |  | Explicit Detail | G |
| 5 | 4 | 161 | 5 | Explicit Detail | B |
| 6 | 5 | 231 | 9 | Implied Idea | H |
| 7 |  |  |  | Vocabulary | A |
| 8 |  |  |  | Main Idea | F |
| 9 | 6 | 80 | 6.1 | Explicit Detail | E |
| 10 |  |  |  | Explicit Detail | J |
| 11 | 7 | 131 | 7.1 | Sequence | C |
| 12 |  |  |  | Main Idea | F |
| 13 | 8 | 184 | 5.7 | Explicit Detail | C |
| 14 |  |  |  | Cause-Effect | F |
| 15 |  |  |  | Cause-Effect | B |
| 16 | 9 | 272 | 9.4 | Cause-Effect | G |
| 17 |  |  |  | Cause-Effect | C |
| 18 |  |  |  | Main Idea | F |
| 19 | 10 | 175 | 7.5 | Explicit Detail | C |
| 20 |  |  |  | Author's Voice | F |
| 21 |  |  |  | Implied Idea | C |
| 22 | 11 | 288 | 10.2 | Vocabulary | J |
| 23 |  |  |  | Main Idea | E |
| 24 |  |  |  | Main Idea | F |
| 25 |  |  |  | Cause-Effect | B |
| 26 | 12 | 328 | 12 | Vocabulary | G |
| 27 |  |  |  | Implied Idea | D |
| 28 |  |  |  | Generalization | K |
| 29 |  |  |  | Explicit Detail | C |
| 30 | 13 | 233 | 10.6 | Sequence | H |
| 31 |  |  |  | Vocabulary | A |
| 32 |  |  |  | Explicit Detail | J |
| 33 |  |  |  | Generalization | C |

## LOCATING INFORMATION

| Question Number | Category | Level | Answer |
| :---: | :---: | :---: | :---: |
| 1 | Diagrams | 3 | D |
| 2 | Tables | 3 | G |
| 3 | Diagrams | 3 | B |
| 4 | Graphs | 3 | K |
| 5 | Tables | 3 | E |
| 6 | Tables | 3 | H |
| 7 | Diagrams | 3 | A |
| 8 | Tables | 3 | H |
| 9 | Forms | 4 | C |
| 10 | Graphs | 4 | K |
| 11 | Tables | 4 | D |
| 12 | Diagrams | 4 | F |
| 13 | Diagrams | 4 | A |
| 14 | Diagrams | 4 | K |
| 15 | Diagrams | 4 | A |
| 16 | Tables | 4 | H |
| 17 | Diagrams | 4 | D |
| 18 | Tables | 4 | K |
| 19 | Diagrams | 4 | B |
| 20 | Diagrams | 4 | J |
| 21 | Diagrams | 4 | A |
| 22 | Graphs | 4 | G |
| 23 | Tables | 4 | C |
| 24 | Diagrams | 4 | H |
| 25 | Graphs | 5 | E |
| 26 | Diagrams | 5 | J |
| 27 | Tables | 5 | B |
| 28 | Tables | 5 | J |
| 29 | Tables | 5 | D |
| 30 | Tables | 5 | G |
| 31 | Diagrams | 5 | C |
| 32 | Diagrams | 5 | J |
| 33 | Tables | 5 | E |
| 34 | Tables | 6 | H |
| 35 | Graphs | 6 | B |
| 36 | Graphs | 6 | F |
| 37 | Graphs | 6 | B |
| 38 | Graphs | 6 | F |

## Applied Mathematics Explanatory Answers

1. (C) $\$ 20-\$ 4.27=\$ 15.73$.
2. (G) $\$ 97.37 \div 13=\$ 7.49$.
3. (E) $47 \cdot \$ 1.55=\$ 72.85$.
4. (H) $6.25 \cdot \$ 3.32=\$ 20.75$.
5. (D) $\$ 114.17-\$ 49.29=\$ 64.88$.
6. (K) $5.7 \mathrm{~m} \cdot 4 \mathrm{~m}=22.8 \mathrm{~m}$.
7. (D) $1.06 \cdot \$ 18,000=\$ 19,080$.
8. (H) $6: 55$ a.m. $+: 20=6: 75$ or $7: 15 \mathrm{a} . \mathrm{m}$.
9. (E) 6 cups $\bullet \frac{2 \text { eggs }}{1.5 \text { cups }}=8$ eggs.
10. (J) 300 yards $\cdot \frac{3 \text { feet }}{1 \text { yard }} \cdot \frac{1 \text { strip }}{4 \text { feet }}=225$ strips.
11. (C) $\frac{(76+82+84+86+72)}{5}=80$.
12. (H) 9 candy bars $\cdot \frac{\$ 7.45}{5 \text { candy bars }}=\$ 13.41$.
13. (E) $2.5 \mathrm{lbs} \cdot \frac{\$ 0.46}{1 \mathrm{lb} .}=\$ 1.15$.
14. (J) 2.5 in. $\cdot \frac{40 \mathrm{miles}}{1 \mathrm{inch}}=100$ miles.
15. (A) $\frac{180 \text { papers }-110 \text { papers }}{2}=35$.
16. (J) $1.09 \cdot \$ 7.85=\$ 8.56$.
17. (C) $\left(2.5\right.$ hours $\left.\cdot \frac{\$ 54}{1 \text { hour }}\right)+\$ 100+\$ 24=\$ 259$.
18. (H) 8 hours $\cdot \frac{\$ 7.55}{1 \text { hour }}=\$ 60.40$, plus

9 hours $\cdot \frac{\$ 10.23}{1 \text { hour }}=\$ 92.07$, plus
43 miles $\cdot \frac{\$ .31}{1 \text { mile }}=\$ 13.33$

$$
=\$ 165.80
$$

19. (E) $.60(.90 \cdot \$ 26.00)=\$ 14.04$.
20. (G) 7 miles $\cdot \frac{.5 \text { hours }}{2 \text { miles }}=1.75$ hours, or 1 hour and 45 minutes.
21. (D) $(4(\$ 7.50+2(\$ 3.00))-(2(\$ 7.50)+4(\$ 3.00))=\$ 9.00$.
22. (G) $(1.08 \cdot \$ 35.99)=\$ 38.87$ vs. $\$ 25+\$ 13=\$ 38$.
23. (D) $(30$ feet $\cdot 36$ feet $) \cdot \frac{\$ 4,000}{12 \text { feet } \cdot 15 \text { feet }}=\$ 24,000$.
24. (K) $\$ 8,500=.98 x \Rightarrow \$ 8,673.47=x$.
25. (B) 25 pots $\cdot\left[\left(\frac{30 \text { inches }}{36 \text { inches }}\right)^{3} \div 1\right.$ pot $]=14.46$ cubic yards, rounded to 15 cubic yards.
26. (H) ( 5 gallons +2 gallons) $\cdot \frac{500 \text { feet }}{5 \text { gallons }}=700$ feet covered by 1 container. $(25$ feet $\cdot 80$ feet $) \cdot \frac{1 \text { container }}{700 \text { square feet }}=2.86$ containers, rounded to 3 .
27. (C) 1 gallon $\cdot\left(\frac{1 \text { liter }}{.264 \text { gallon }}\right) \cdot\left(\frac{\$ .75}{1 \text { liter gallon }}\right)=\$ 2.84$.
28. (F) $(300$ miles $\cdot \$ 0.20)+\$ 20=\$ 80$ vs. $(220$ miles $\cdot \$ 0.25)+\$ 30=\$ 85 \quad\left(\frac{\$ 5}{\$ 85}\right) \cdot 100=5.9 \%$.
29. (B) $2(200$ feet $\cdot 100$ feet $)+.5(100$ feet $\bullet 100$ feet $)=45,000$ square feet.
$\frac{\$ 855,000}{45,000}=\frac{\$ 19}{\text { square foot }}$.
30. (J) $\frac{3 \text { inches }}{12 \text { inches }} \cdot 3.14 \cdot 120$ feet $) \cdot \frac{1 \text { roll }}{15 \text { square feet }}=6.28$ rolls, rounded to 7 rolls.
31. (D) 1 gallon $\cdot \frac{0.5 \text { hour }}{1 \text { gallon }} \cdot \frac{60 \text { miles }}{1 \text { hour }}=30$ miles.

1 gallon $\cdot \frac{0.83 \text { hour }}{1 \text { gallon }} \cdot \frac{30 \text { miles }}{1 \text { hour }}=25$ miles.
$\frac{30 \mathrm{~m} . \mathrm{p} . \mathrm{h} .+25 \mathrm{~m} . \mathrm{p} . \mathrm{h} .}{2}=27.5$.
32. (G) $.80 \cdot 3,200$ gallons $=2,560$ gallons emptied each day. 2,560 gallons $\cdot \frac{1 \text { hour }}{240 \text { gallons }}=10.66$ hours, or 10 hours and 40 minutes.
33. (C) $\$ 297(1.09-1.06)=\$ 8.91$.

## Reading for Information Explanatory Answers

1. (A) This question asks the reader to determine which grade will be called first. Although the word "first" is not used in this memo, you can infer that Kindergarten will be called first because the memo states that grades 2 and 3 will be called after Kindergarten has been seated and that grades 4 and 5 will be called last.
2. (J) The key to answering this item correctly is reading the question carefully. You must find the part of the memo that explains what needs to be done before the End of Shift Buzzer rings, or after the End of Shift Wash-Up Buzzer rings: personal clean up and work area clean up.
3. (A) In order to answer this question, you need to locate the detail in the bulletin. The answer is explicitly stated in the fourth sentence of the first bullet point.
4. (G) This question also requires that you locate a specific fact that has been clearly stated in the bulletin. In this case, the answer is stated in the second sentence of the third bullet point.
5. (B) The answer to this question is implied, not explicitly stated. After reading the entire bulletin, it is clear that the refrigerator is cleaned only on Friday afternoons.
6. (H) To answer this question correctly, you must first understand the relationship between the budget-conscious traveler and his/her expectations. Then, you must recognize that the budget-conscious traveler can expect four of the five answer choices. The one that such a traveler should not expect is the answer to the question.
7. (A) Use context clues to answer this question. Once you have interpreted what the saying "you get what you pay for" means in the context of the letter, you can then match that meaning to the appropriate answer.
8. (F) The main purpose of this letter is clearly stated in the first paragraph. While you could infer that the real purpose for writing this letter is to promote business for Regal Star Cruises, that answer is not provided as an option.
9. (E) This detail is explicitly stated in the notice.
10. (J) This answer is also explicitly stated in the notice.
11. (C) The key to answering this question is twofold. First, find the step that talks about the revised purchase order (Step 8). Then, you must locate the information that explains what to do next (Step 9).
12. (F) The main purpose of this work instruction is clearly stated in the first paragraph.
13. (C) After carefully reading this letter, you know that Peter Vance has specifically mentioned being pleased with four of the five answer choices provided. (C) is the only answer choice that was never mentioned in the letter.
14. (F) In order to answer this question correctly, you have to understand the cause and effect sequence of events that is described in the third paragraph.
15. (B) This question also deals with a cause and effect relationship, but this one is more subtle than the one described in item 14. The answer is found in the second paragraph of the letter. When Peter Vance tells the sales representative that he usually rides on blacktopped country roads, the sales representative then suggests the Galaxy 350 on-road/off-road bike.
16. (G) Locate the information that explains what "all persons" (spectators) must do until " $11: 59$ " (before midnight). In the second paragraph, it states: "All persons and property such as blankets, chairs, and coolers must remain on the curb until 11:59 P.M. on December $31^{\text {st }}$."
17. (C) The answer to this question is clearly stated in the last sentence of the second paragraph.
18. (F) Although the answer to the question is not clearly stated in the passage, you can infer from the information provided in the second and fourth paragraphs that the logical answer is ( F ).
19. (C) In the first numbered point, the memo clearly states: "The server should bring menus to the table within five minutes of seating the diners."
20. (F) In the first paragraph of this memo, Paul Vionne discusses the importance of his restaurant's reputation. Everything else in the memo is mentioned with that reputation in mind.
21. (C) To answer this question, you need to have a clear understanding of what the people who dine at Paul's Restaurant should expect. Paul emphasizes promptness, courtesy, and knowledge, but he never says anything about creating a cozy atmosphere.
22. (J) You must use context clues to determine that the appropriate meaning of "absorb" is to pay for.
23. (E) The most likely reason that Dyno Brand, Inc. has not raised its prices since 2000 is clearly identified in the first paragraph of this letter. There, it states that because of a "previously stable metals market," the company has been able to keep its pricing consistent since June of 2000 . None of the other answer choices are even mentioned in the letter.
24. (F) In the first and second paragraphs, the author summarizes the events that have led to the need for a price increase. Then, in the third paragraph, the author actually states that Dyno Brand, Inc. will be increasing its prices as a result of the increase in costs to his company. From this development, the purpose for writing the letter is clear.
25. (B) The answer to this question is implied. You must conclude that if Dyno Brand, Inc. is increasing its prices on May 1, 2004, then an order placed in June will cost more.
26. (G) Although the vocabulary is difficult in this document, you can determine the meaning of difficult words, such as "defamatory," through the use of context clues.
27. (D) In the third paragraph, the document states: "The policy that follows cannot possibly set down rules to cover every possible situation." However, it doesn't specifically explain why. Having read the entire document, you should conclude that a specific list of rules would be impossible to create due to the number of possible scenarios.
28. (K) In order to answer this question, you must use information from various parts of the document to make the generalization that "everything you say and do using the company's electronic media and services could belong to the company."
29. (C) It is clear from the PERSONAL USE paragraph that the company is primarily concerned with its guidelines and principles being followed.
30. (H) After recognizing that an employee is taking the first step in the grievance procedure by initiating a complaint, you should then be able to use the logical sequence of the passage to locate the answer to the question.
31. (A) You must use context clues to determine the appropriate meaning of "resolve."
32. (J) To answer this question correctly, you should first decide which statements regarding a request for impartial arbitration are true. Once you have determined the four true statements, the remaining statement will be the correct answer choice.
33. (C) In order to answer this question, you must first realize the sequential order involved in the grievance procedure. This will immediately eliminate two of the five answer choices that are provided. You must then use the information from the passage to make the following generalization: If an Employee Complaint Form is submitted, it simply means that any attempt thus far at a resolution has failed.

## Locating Information Explanatory Answers

1. (D) Locating Information/Diagrams/Comprehension (Level 3)

The unmarked major tick mark between the 8 and 10 is equal to 9 amperes. The minor tick marks designate divisions of 0.2 amperes. Therefore, the needle is closest to 9.6 amperes, (D).
2. (G) Locating Information/Tables/Comprehension (Level 3)

According to the label, a serving size of chicken noodle soup is $1 / 2$ cup. And in one serving size of soup, there is 890 mg of sodium. Therefore, (G) is the correct answer.
3. (B) Locating Information/Diagrams/Comprehension (Level 3)

According to the business card shown, the fax number for the vice president of the company is 303-9844001, (B).
4. (K) Locating Information/Graphs/Comprehension (Level 3)

According to the pie chart, the category of online radio format with the highest percentage of listeners is pop contemporary, (K), with $30 \%$.
5. (E) Locating Information/Tables/Comprehension (Level 3)

According to the table, blood from a donor with type B - blood is compatible with the blood of recipients of blood types $B-, B+, A B-$ and $A B+,(E)$.
6. (H) Locating Information/Tables/Comprehension (Level 3)

All of the given rates are for 4 weeks. The rates for super tail panel advertisements are given in the fourth table: 50 units cost $\$ 27,500$. The customer also wants a full wrap advertisement, which according to the last table costs $\$ 8,000$. Therefore, the total cost of the 4 -week campaign is $\$ 27,500+\$ 8,000$, (H).
7. (A) Locating Information/Diagrams/Comprehension (Level 3)

Using the distance scale and compass, the fire is approximately 10 miles northwest of $B,(A)$.
8. (H) Locating Information/Tables/Comprehension (Level 3)

You must arrive at the Cooper Union stop at or before 11:00 a.m., so you need to catch the bus that arrives at Cooper Union at 10:50 a.m., as indicated in the last column of the bus schedule. You are at Fifth Avenue and Central Park North (second column of table), so you must catch the bus at 10:18 a.m., (H).
9. (C) Locating Information/Forms/Comprehension (Level 4)

According to the packing slip, 65 ornaments were ordered but only 42, (C), were actually shipped, leaving 23 on backorder.

## 10. (K) Locating Information/Graphs/Comprehension (Level 4)

The vertical axis of the graph simply gives relative values for comparison of the different knife steels. The item stem states that you are to purchase the steel with the most wear resistance. Wear resistance, the second column of each group, is the highest for BC-S22N, (K).

## 11. (D) Locating Information/Tables/Comprehension (Level 4)

For each pump, the middle row shows the pressure for a 15 foot lift. Under the 30 PSI, the pumps rated with a pressure greater than 10 GPM are EK07S and EK10S, (D).

## 12. (F) Locating Information/Diagrams/Comprehension (Level 4)

Of the steps listed in the answer choices, only (F)—"disengage the three hooks to separate the damper assembly into two pieces"-is listed before the beginning of Step 4, "Removal of the Print Head."

## 13. (A) Locating Information/Diagrams/Analysis (Level 4)

Of the five sites listed only 64,85 and 91 have 50 -A electrical service. Site 85 is far away from both the restroom and the boat launch. Site 91 is closer to the restroom than site 64 and is approximately the same distance from the boat launch. Therefore, (A) is the correct choice.
14. (K) Locating Information/Diagrams/Analysis (Level 4)

The group is seated in the very last row of Section OL. Of the listed available locations, Row AA, Section MZL, (K), is closest to the last row of Section OL.

## 15. (A) Locating Information/Diagrams/Comprehension (Level 4)

According to the flowchart, the policy for title insurance on a home is issued to the lender and the new home owner, (A).

## 16. (H) Locating Information/Tables/Comprehension (Level 4)

A nominal board size of $2^{\prime \prime} \times 8$ " corresponds to the second grouped row of values in the table. In that group, a board spacing of 12 " is the first listed row. Read across this row to "Southern Yellow Pine, \#2 grade": the $40 \mathrm{lb} / \mathrm{ft}^{2}$ live load is the second column: 13-6, which corresponds to 13 feet and 6 inches, (H).

## 17.(D) Locating Information/Diagrams and Tables/Analysis (Level 4)

The rate schedule is sorted by two different load types: regular and heavy/dense material. The customer requests an estimate for a $1 / 2$ load, which according to the table at the upper left costs $\$ 362$. There are additional surcharges for certain items, including empty propane tanks, so the tank will cost an additional $\$ 5$. The information also states that all rates include disposal fees, so the total estimate is $\$ 362+\$ 5$, (D).

## 18. (K) Locating Information/Tables/Comprehension (Level 4)

Road bikes are shown in the second table. According to that table, a rider 5 feet and 10 inches tall should ride a bike with a frame size of 55 centimeters, (K).

## 19. (B) Locating Information/Diagrams and Tables/Comprehension (Level 4)

This item includes a lot of extraneous information. Locate Durango, CO in the table: the daily rate for meals and incidental expenses is $\$ 61$, (B), regardless of the time year.

## 20.(J) Locating Information/Diagrams and Tables/Comprehension (Level 4)

The reading on the hydrometer indicates a specific gravity of approximately 1.222. According to the table, a specific gravity of 1.222 corresponds to a percentage of maximum charge between $70 \%$ and $75 \%$. Therefore, (J) is the correct choice.
21. (A) Locating Information/Diagrams/Comprehension (Level 4)

According to the flowchart shown, if you want the garage to be allowed to stand, you must respond to the Building Notice requesting that the building work be allowed to remain, (A).
22. (G) Locating Information/Graphs/Analysis (Level 4)

On September 2, the first systolic pressure measurement is approximately 130 mmHg and the first diastolic pressure measurement is slightly under 90 mmHg . According to the blood pressure category chart, these pressures correspond to pre-hypertension, (G).
23. (C) Locating Information/Tables/Analysis (Level 4)

According to the mileage chart, it is 226 miles from Pierre to Sioux Falls. According to the table, the rental cost for 226 miles and returning it to an alternate site is $\$ 250$, (C).

## 24. (H) Locating Information/Diagrams and Tables/Analysis (Level 4)

The antifreeze chart gives temperatures in degrees Celsius, so read the upper scale of the temperature gauge: approximately $-30^{\circ} \mathrm{C}$. According to the antifreeze chart, a cooling system with 10.4 L capacity needs $4.73 \mathrm{~L},(\mathrm{H})$, of antifreeze to be effective to $-30^{\circ} \mathrm{C}$.

## 25. (E) Locating Information/Graphs and Tables/Analysis (Level 5)

According to the Sliding Price Scale, the cost of electricity is greater than 12 cents per kilowatt hour when energy usage is above 10 MW . According to the graph, this occurs from 8:00 to 6:30 p.m., (E).
26. (J) Locating Information/Diagrams and Tables/Analysis (Level 5)

According to the flight board, you arrive from Atlanta at Gate F1, which is in Terminal 2. The flight to Houston departs from Gate L5, which is in Terminal 3. According to the map, you can either walk from Terminal 2 to Terminal 3 across the upper level or take the tram on the lower level, (J).

## 27. (B) Locating Information/Tables/Analysis (Level 5)

According to the chart, a person who is 5 feet, 8 inches tall and weighs 150 pounds is normal, (B).

## 28. (J) Locating Information/Tables/Analysis (Level 5)

According to the chart, a person who is 5 feet, 5 inches tall and weighs 220 pounds has a body mass index (BMI) of 38, (J).

## 29. (D) Locating Information/Tables/Analysis (Level 5)

According to the table, broccoli (fall), (A), Brussels sprouts, (B), cabbage (fall \& winter), (C), and Chinese cabbage, (E), are all sowed in July and transplanted in August. Only collards, (D), are sowed in July and August but not transplanted until September. Since the summer program is during July and August only, students will not be sowing and then transplanting collards, (D).

## 30. (G) Locating Information/Tables/Analysis (Level 5)

According to the table, the vegetables that are harvested in the late fall include broccoli, cabbage, cauliflower, Chinese cabbage, lettuce, spinach, and Swiss chard, (G).
31. (C) Locating Information/Diagrams and Tables/Comprehension (Level 5)

The "Tree Growth Limits" diagram indicates that a tree in the growth limit zone should be scheduled to be trimmed within two weeks. If the tree is next to a 33 kV high voltage power line, the growth limit zone extends to a radius of 8.2 feet, (C).
32. (J) Locating Information/Diagrams and Tables/Comprehension (Level 5)

The "Minimum Distances for New Tree Plantings" diagram indicates that trees between 30 and 70 feet tall at maturity need to be planted at least 35 feet from any power line, (J).

## 33. (E) Locating Information/Tables/Analysis (Level 6)

According to the first table, if Austin, Texas has an average annual extreme low temperature of $-9.5^{\circ} \mathrm{C}$, it must be in hardiness zone 8 . According to the second table, the only non-fruit bearing tree suggested for zone 8 that does not grow taller or spread wider than 40 feet is a weeping willow, (E). Note that while both a black cherry, (A), and a red apple, (D), grow in zone 8 and don't grow taller or spread wider than 40 feet, but these are fruit-bearing trees.

## 34. (H) Locating Information/Tables/Application (Level 6)

According to the first table, St. Paul, Minnesota is located in zone 4. According to the second table, a white spruce grows to be 60 feet tall with a spread of 20 feet. The only other zone 4 tree that is closest in size to a white spruce without growing bigger is an Eastern Red Cedar, (H).

## 35. (B) Locating Information/Graphs and Tables/Analysis (Level 6)

Find the intersection of strength $1.00 \%$ and 3 oz . per half gallon. These two lines intersect in the "Weak" Quadrant at extraction 20\%.

## 36. (F) Locating Information/Graphs and Tables/Application (Level 6)

First, determine how many ounces of coffee per half gallon of water were used, based on the equivalence chart provided. 8 cups of water is equivalent to a $1 / 2$ gallon of water, so use the 4.00 oz . line on the graph.

## 37. (B) Locating Information/Graphs and Tables/Comprehension (Level 6)

In both graphs, the levels of cyanide and lead are lowest for all three rivers during Week 2, (B).
38. (F) Locating Information/Graphs and Tables/Analysis (Level 6)

According to the table, lead is defined as a pollutant above $0.05 \mathrm{mg} / \mathrm{L}$ and cyanide is defined as a pollutant above $0.01 \mathrm{mg} / \mathrm{L}$. According to the cyanide graph, cyanide levels rose above $0.01 \mathrm{mg} / \mathrm{L}$ in the Yahara River for Week 7 and the Middle Fork River for Week 9 and Week 10. According to the lead graph, lead levels in the Yahara River rose above $0.05 \mathrm{mg} / \mathrm{L}$ for Week 7 and Week 8; lead levels in the Middle Fork River rose above $0.05 \mathrm{mg} / \mathrm{L}$ for Week 8 . Therefore, both cyanide and lead levels rose above the quantity or concentration at which they are defined as pollutants only in the Yahara River for Week 7, (F).

