Name:

Assignment: Cumulative Final Exam

**Show all work for all problems. Justify all True/False or Yes/No questions with supportive work or explanations. Leave answers exact unless instructed to round in the problem. Use correct units when applicable.**

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| Section # | Question  | Work and Answer | Instructor Comments |
| 1 | Use inductive reasoning to give the next element in the list: -2, 4, -8, 16 |  |  |
| 2 | Does the conclusion below follow logically from the premises? What type of reasoning is being used?Premise: If Thomas is well, he will go fishing.Premise: Thomas is well.Conclusion: Thomas will go fishing. |  |  |
| 3 | The sum of measures of the angles of a polygon is 1080°. How many sides does it have? |  |  |
| 4 | ***Refer to the figure below and answer true or false in problems 4-5.***∠1 and ∠2 are complementary. |  |  |
| 5 | ∠1 and ∠DAE are adjacent. |  |  |
| 6 | ***Refer to the figure below to answer problems 6-7.***What angles are remote interior ∠’s to ∠CAD? |  |  |
| 7 | If AB = 15 and the perimeter of ΔABC is 40, find AC. |  |  |
| 8 |  |

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| Statements | Reasons |
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| 9 | Solve the proportion. |  |  |
| 10 | Find the geometric mean between 64 and 100. |  |  |
| 11 | Is ΔABC~ΔA'B 'C' if m∠B =m∠B ', AB = 36, BC = 24, A'B ' = 90, and B'C' = 60? |  |  |
| 12 | If the shadow of a woman 5 ft tall is 8 ft in length, how long a shadow will a 75 ft tower cast? |  |  |
| 13 | In right Δ, a = $\sqrt{23}$ ft and c =12 ft. Find b. |  |  |
| 14 | ***Use the figure below to answer questions 14-17.*** Ray PA and Ray PB are tangents, m∠AOB = 150°, BF = 6m, DF = 5m, EF = 3m, and PA = 14 m.Find m∠P. |  |  |
| 15 | Find PB. |  |  |
| 16 | Find m∠PAO. |  |  |
| 17 | Find CF. |  |  |
| 18 | Find the area of a regular polygon with perimeter 64 cm and apothem 12 cm. |  |  |
| 19 | Find the lateral area of a cylinder with radius 4 in and height 6.2 in. Round the answer to two decimal places. |  |  |
| 20 | Find the surface area of right prism with height 18.3 cm and base that is an equilateral triangle with side 7.4 cm. |  |  |
| 21 | Find the volume of a cone with radius 26.8 inches and height 31.7 inches. Round the answer to one decimal place. |  |  |
| 22 | Find the area of a parallelogram with base 18 cm and height 14 cm. |  |  |
| 23 | ***Use the figure below for questions 23 and 24. Answer true or false. Justify your answers.*** |  |  |
| 24 |  |  |  |
| 25 | What is the measure of a central angle of a regular polygon with 30 sides? |  |  |
| **Textbook Problems/Cumulative Test Rubric** |
| Grading is as follows. Each problem is rated on a scale of 0 to 1. The ratings are totaled then divided by the number of problems. The resulting percent is your grade out of 100 points for the assignment. |
| 1 Correct Answer: Has correct answers, including units, if applicable, and supportive work. | 3/4 Mostly Correct Answer:Has a minor mistake but includes units, if applicable, and supportive work. | 1/2 Incorrect Answer:Has more than a minor mistake but adequate supportive work is shown | 1/4 Unsupported Answer:Correct answer with correct units, if applicable, but no supportive work. | 0 Unacceptable Answer: Incorrect answer and no supportive work. |
| **/25= %** |