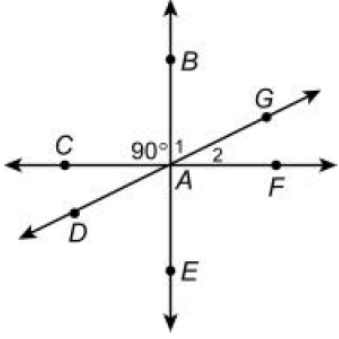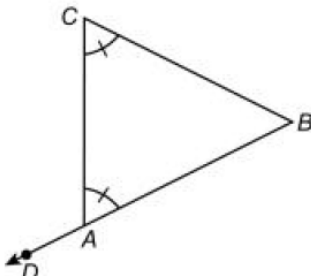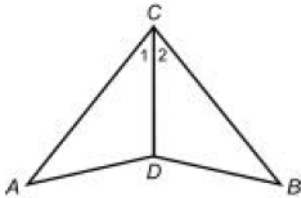Name:

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.

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	Give a two column proof. Given: $\overline{CD}$ bisects ∠ACB $\qquad$ AC = BC Prove: ∠A ≅ ∠B 	Statements $\qquad$ Reasons		

9	Solve the proportion. $\dfrac{y+1}{y-5} = \dfrac{9}{7}$		
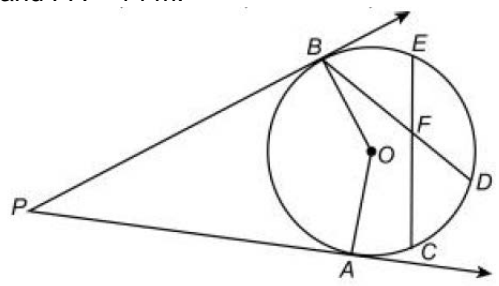
10	Find the geometric mean between 64 and 100.		
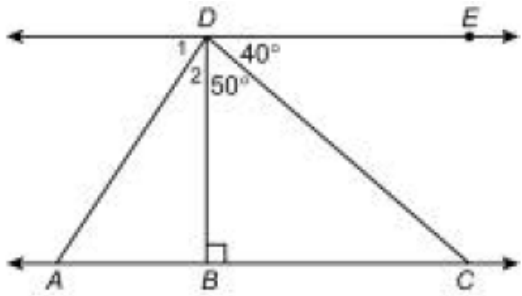
11	Is ΔABC~ΔA'B 'C' if m∠B =m∠B ', AB = 36, BC = 24, A'B ' = 90, and B'C' = 60?		

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.* $\overline{BD} \perp \overline{DE}$		
24	$m\angle BCD = 50°$		
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:	3/4 Mostly Correct Answer:	1/2 Incorrect Answer:	1/4 Unsupported Answer:	0 Unacceptable Answer:
Has correct answers, including units, if applicable, and supportive work.	Has a minor mistake but includes units, if applicable, and supportive work.	Has more than a minor mistake but adequate supportive work is shown	Correct answer with correct units, if applicable, but no supportive work.	Incorrect answer and no supportive work.

/25= %