

# CP1 GEOMETRY

## CHAPTER 1

### INTRODUCTION TO GEOMETRY

#### HOMEWORK ASSIGNMENTS

Remember to show your work for all problems. Showing only the answer is NOT acceptable if work is required to do the problem. If you can't finish a problem, at least show me that you attempted it.

<u>Assignment</u>	<u>Page</u>	<u>Problems</u>
#1: Section 1-1	7	1-5, 6c, 7, 8ab, 10ab, 11ab, 12
#2: Section 1-2	14	1ab, 2b, 4, 5a, 6bd, 8, 9ab, 10, 11, 13-16
#3: Section 1-3	20	1, 3, 4ab, 6, 7, 8ab, 9-12, 13ab, 14ab
#4: Section 1-4	26	8, 9, 10ab, 12-14
#5: Section 1-5	32	1ab, 2ab, 3ab, 4ad, 5ab, 6-9, 18, 19
#6: Section 1-6	37	1-4, 6, 7, 9
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CP1 Geometry  
Chapter 1 Answer Key

Assignment #1, page 7

1. AB, BA, line l
2.  $\angle CED$ ,  $\angle DEC$ ,  $\angle E$ ,  $\angle 7$
3. No
4. RS, ST, RT
5. b, line AC or  $\angle CEA$ , E, none, ray EC,  $\angle ABC$ , triangle BEC
- 6c. 3
7. you can compare
- 8a. Points
- b. Rays, endpoint or vertex
- 10a. 21.5 sq. cm
- b. 22.2 cm
- 11a.  $37 \frac{1}{2}$
- b. 28
12. compare

Assignment #2, page 14

- 1a.  $61 \circ 40'$
- b.  $71 \circ 42'$
- 2b.  $19 \frac{3}{4}$
- 4a. T
- b. V W
- c. PR
- d.  $\angle QSR$
- e. 6
- 5a.  $87 \circ 10''$
- 6b. 20
- d. obtuse
8. 55
- 9a. 90
- b. 45
- 10a.  $PQ=5$
- b. answers may vary
- c. 8
11.  $51 \ 53' \ 50''$
13. 22
14. 2;  $1 \frac{2}{3}$
15.  $y = x + 17$
16. 67.5

Assignment #3, page 20

1. 134
- 3a. B + D
- b. No, Yes
- c. AB and BC
- d. Yes
- e. Not necessarily
- f. B
- g. G
- h. AF
- i. EB, ED
- j. E + B
- 4a. No
- b. Yes
6. 54
- 7a.  $33 \circ + 40 \circ$
- 7b.  $60 \circ + 70 \circ$
- 7c.  $45 \circ + 45 \circ$
- 8a.  $124 \circ 36'$
- b.  $84 \ 5/6 \circ$
9. 135
10. compare with neighbors
11. compare with neighbors
12. B
- 13a. 15
- b. 3
- 14a.  $-8 < Q < 4$
- b.  $PQ + QR = PR = 12$

Assignment #4, page 26

8. compare
9. 110
- 10a. 7
- b.  $x > 7.5$
12. -8
- 13a. compare
- 13b. Yes
- 13c. It is the midpt of AA'
14.  $9 < y < 27$

Assignment #5, page 32

1. CO = DO
- b. WX=WV
- 2a.  $\angle NRO = \angle PRO$
- b.  $\angle SXT = \angle TXV = \angle WXV$
- 3a. ray JG
- b. ray OK
- 4a. 30
- d.  $43 \circ 7'$
- 5a. 2;9
- b. 14
6. Yes
7. 43
- 8a. 4
- b. 8
- c. 1
- d. 9
- e. BD
- f. No
9. Yes
18. 80
19. 16

Assignment #6 page 37

- Do not do problem #6
- Compare all others to neighbor

Assignment #7, page 42

1. Undefined terms, postulates, definitions, and theorems
2. Definitions
- 3a. Yes
- b. No
- 4a. Theorem
- b. Definition
- 5a. If an angle is acute, then it is a 45 degree angle
- 5b. false
7. No-past outcomes don't influence current outcomes
8. Correct
9. False, since don't know  $\angle C$  is acute or not
10. False, could be a car
12. True
14. Wendy=purple monkey
- Katie= red crocodile (try a chart)
- Jody=green lizard

Assignment #8, page 47

- 1a. If a person is 18 years old, then he or she may vote in a federal election.
- 1b. If two angles are opposite angles of a parallelogram, then they are congruent.
- 2a. Converse: If a triangle has a perimeter of 30, then each side has a length of 10; FALSE
- Inverse: If each side length of a triangle is not 10, then the perimeter is not 30; FALSE
- Contrapositive: If the perimeter of a triangle is not 30, then each side length is not 10; TRUE
3. a
- 4a. T
- b. F
- c. F
- d. F
- 5a.  $b \Rightarrow f$
- 5c. If bobcats begin to browse, then horses head for home.
6. Converse: If M, A, and B are collinear, then M is the midpoint of AB; FALSE
- Inverse: If M is not the midpoint of AB, then M, A and B are noncollinear; FALSE
- Contrapositive: If M, A, and B are noncollinear, then M is not the midpoint of AB; TRUE

Assignment #9, page 51

1.  $\frac{3}{5}$
5.  $\frac{1}{3}$
6.  $\frac{3}{10}$
7.  $\frac{2}{5}$
8.  $\frac{1}{10}$
9.  $\frac{9}{25}$
10.  $\frac{2}{5}$
11.  $\frac{5}{12}$

Assignment #10, page 54 Review

- 1a. AR, AD, RA, RD, DA, DR  
b. BA, BC  
c. DF  
d. CB  
e. 60° 52° 120°  
f. no  
g. no angle can be called  $\angle B$  since there are 3 angles there  
h. AC  
i. EF  
j.  $\angle I$   
k. A  
l. FE
- 2a. right   b. obtuse  
c. acute   d. straight   e. right
- 3a. 69° 41' 35"   b. 50° 59' 43"
- 4a. 46° 52' 30"   b. 132  $\frac{1}{10}$ °
- 5a.  $BC \cong RT$    b.  $\angle A \cong \angle S$
- 6a. No   b. Yes
7. 20
8. 30:90:60
9. No
16.  $\angle 1 = 61.6^\circ$  (given)  
 $\angle 2 = 61 \frac{3}{5}^\circ$   
 $\frac{3}{5} = 6/10 = .6$    Subst  
 $\angle 2 = 61.6^\circ$    Subst  
 $\angle 1 \cong \angle 2$  they have same measure
- 17a. -3   b. -13
18. 5
- 19a.  $\frac{2}{5}$    b.  $\frac{1}{10}$
20. 13° 24'
21. a. 30°   b. 140°   c. 127  $\frac{1}{2}$ °
22. compare to neighbors
23. 14
- 24a.  $y = -\frac{3}{4}x + 22 \frac{1}{2}$    b. 18; 9
25. 15
26. 30
28. Ask me
29. 48° 50' 44"
30. 20°
- 31a. 44.5°   b. 44° 33'
32.  $\frac{1}{3}$
33.  $7 < PR < 31$
- 35a.  $90 < m < Q < 180$    b.  $59 < x < 104$
38. compare with others