

Lesson 2.5

Homework Answers

Pg 100 - #1-25 odd, 29-35, 39-42, 43-53 odd, 56-59

1. $\angle AOB$ or $\angle DOC$	35. a) V
3. $\angle EOC$	b) 180
5. $\angle AOB$ and $\angle DOC$ or $\angle BOC$ and $\angle AOD$	c) Division
7. 30	d) right
9. 30	39. $x = 9; 36$
11. No; there are no markings	40. $x = 10; 105, 75$
13. No; there are no markings	41. $x = 18; 54, 36$
15. Yes; there are markings	42. $x = 11; 49, 41$
17. Yes; can conclude the \angle 's are vert from the diagram	43. Supplements of $\cong \angle$'s are \cong .
19 a) 90	45. 45, 45
b) 90	47. $m\angle A = 72, m\angle B = 18$
c) Substitution	49. $m\angle A = 60, m\angle B = 30$
d) $m\angle 3$	51. $m\angle A = 120, m\angle B = 60$
21. $x = 25, y = 105$	53. $m\angle A = 60, m\angle B = 120, m\angle C = 30$
23. 60, 60	56. $\angle 2 \cong \angle 4$ given
25. 120, 120	$m\angle 2 = m\angle 4$ defn of $\cong \angle$'s
29. 15; 25, 25	$m\angle 1 + m\angle 2 = 90$ defn complem \angle 's
30. $x = 14, y = 15; 50, 50, 130$	$m\angle 3 + m\angle 4 = 90$ defn complem \angle 's
31. a) right angle	$m\angle 1 + m\angle 2 = m\angle 3 + m\angle 4$ subst POE (= 90)
b) $m\angle Y$	$m\angle 1 + m\angle 2 = m\angle 3 + m\angle 2$ subst POE ($m\angle 2 = m\angle 4$)
32. $\angle DOB \cong \angle AOC$	$m\angle 1 = m\angle 3$ subtraction POE
and $\angle DOA \cong \angle BOC$; vert \angle 's	$\angle 1 \cong \angle 3$ defn $\cong \angle$'s
33. $\angle EIG \cong \angle FIH$; all right \angle 's are congruent;	57. $x = 30, y = 90; 60, 120, 60$
$\angle EIF \cong \angle HIG$; they are complements of the same \angle .	58. $x = 35, y = 70; 70, 110, 70$
34. $\angle KPJ \cong \angle MPJ$; they are marked congruent;	59. $x = 50, y = 20; 80, 100, 80$
$\angle KPL \cong \angle MPL$; they are supplements of congruent \angle 's	