

LESSON 19-1

Practice and Problem Solving: A/B

1. \overline{AB} , \overline{AD} , \overline{AE}
2. $\angle ACB$, $\angle BCD$
3. $\angle BAD$, $\angle BAE$, $\angle DAE$
4. $m\angle S = 125^\circ$, $m\angle T = 227^\circ$
5. $m\angle G = 67^\circ$, $m\angle H = 203^\circ$
6. $m\angle CED = 33^\circ$, $m\angle E = 192^\circ$
7. $m\angle FGI = 9^\circ$, $m\angle H = 78^\circ$
8. $x = 20$
9. $a = 6$
10. 64°
11. 41°
12. 73°

LESSON 19-2

Practice and Problem Solving: A/B

1. $m\angle C = 127^\circ$, $m\angle D = 98^\circ$
2. $m\angle R = 125^\circ$, $m\angle U = 76^\circ$
3. $m\angle K = 90^\circ$, $m\angle L = 90^\circ$, $m\angle M = 90^\circ$
4. yes
5. no
6. yes
7. yes
8. $m\angle X = 71^\circ$, $m\angle Y = 109^\circ$, $m\angle Z = 109^\circ$, $m\angle W = 71^\circ$
9. $m\angle C = 90^\circ$, $m\angle D = 90^\circ$, $m\angle E = 90^\circ$, $m\angle F = 90^\circ$
10. $m\angle T = 68^\circ$, $m\angle U = 95^\circ$, $m\angle V = 112^\circ$, $m\angle W = 85^\circ$
11. $m\angle K = 59^\circ$, $m\angle L = 73^\circ$, $m\angle M =$

$$121^\circ, m\angle N = 107^\circ$$

LESSON 19-3

Practice and Problem Solving: A/B

1. $m\angle ABC = 90^\circ$
2. $m\angle DCB = 140^\circ$
3. $m\angle BDA = 70^\circ$
4. $m\angle CDB = 20^\circ$
5. $m\angle BCD = 148^\circ$
6. $m\angle CDA = 90^\circ$
7. $m\angle BED = 74^\circ$
8. $m\angle DBA = 74^\circ$
9. $x = 62$, $m\angle NQM = 63^\circ$, $m\angle PNQ = 90^\circ$, $m\angle NPM = 117^\circ$
10. $x = 24$, $m\angle MQN = 46^\circ$, $m\angle QMP = 90^\circ$, $m\angle NPM = 134^\circ$
11. $EF = 7.8$
12. $EF = 50$

LESSON 19-4

Practice and Problem Solving: A/B

1. $x = 1$, $AD = 6$, $BE = 9$
2. $y = 7$, $FH = 8.3$, $GI = 9.4$
3. $z = 7$, $PS = 9.4$, $RT = 9.4$
4. $m = 4.5$, $UW = 8.5$, $VX = 9$
5. $x = 4.5$, $BD = 9.5$, $FD = 9.5$
6. $y = 11.5$, $GJ = 21$, $GK = 17.5$
7. $z = 19$, $SQ = 18$, $GK = 28$
8. $n = 8.25$, $CE = 20.25$, $CF = 27$
9. $x = 1.5$, $IK = 2$
10. $y = 10$, $KM = \frac{100}{7}$

LESSON 19-5

Practice and Problem Solving: A/B

1. $m\angle RPS = 130^\circ$
2. $m\angle YUV = 81^\circ$
3. $m\angle ABE = 64^\circ$, $m\angle CDE = 136^\circ$
4. $m\angle LKI = 119^\circ$, $m\angle J = 42^\circ$
5. $x = 64$
6. $x = 47$
7. $x = 45$
8. $x = 4$
9. $m\angle Z = 120^\circ$
10. $m\angle DE = 80^\circ$