Mth113 - Mr. C.   Name_____

Week 9 Practice - Ref. Ch. 6-1 & 6-2

Date_____ Period_____

LOS (ASA, AAS) or LOC (SAS, SSS). Find each measurement indicated. Round your answers to the nearest tenth.

1) In $\triangle XYZ$, $m\angle X = 83°$, $m\angle Y = 74°$, $z = 13$
Find y

2) In $\triangle FDE$, $m\angle F = 114°$, $m\angle D = 34°$, $e = 18$
Find d

3) In $\triangle BCA$, $m\angle C = 11°$, $m\angle A = 14°$, $b = 42$
Find a

4) In $\triangle YZX$, $m\angle Y = 112°$, $m\angle Z = 26°$, $x = 26$
Find z

5) In $\triangle CAB$, $m\angle C = 154°$, $m\angle A = 19°$, $c = 47$
Find a

6) In $\triangle QRP$, $m\angle Q = 76°$, $m\angle P = 41°$, $r = 34$
Find q

7) In $\triangle TRS$, $m\angle T = 107°$, $m\angle S = 34°$, $r = 27$
Find t

8) In $\triangle PKH$, $m\angle P = 99°$, $m\angle K = 53°$, $h = 10$
Find k

9) In $\triangle ZXY$, $m\angle Z = 28°$, $m\angle X = 34°$, $z = 16$
Find x

10) In $\triangle PQR$, $m\angle P = 61°$, $m\angle Q = 89°$, $r = 8$
Find q

11) In $\triangle RST$, $m\angle S = 28°$, $m\angle T = 12°$, $s = 27$
Find t

12) In $\triangle HPK$, $m\angle P = 19°$, $m\angle K = 59°$, $p = 8$
Find k

13) In $\triangle ABC$, $b = 9$, $c = 29$, $m\angle A = 54°$
Find a

14) In $\triangle EFD$, $f = 28$, $d = 26$, $m\angle E = 70°$
Find e

15) In $\triangle PKH$, $k = 15$, $m\angle P = 96°$, $h = 29$
Find p

16) In $\triangle TRS$, $m\angle T = 143°$, $r = 18$, $s = 21$
Find t

17) In $\triangle BCA$, $c = 29$, $m\angle B = 75°$, $a = 23$
Find b

18) In $\triangle PQR$, $r = 19$, $m\angle P = 17.5°$, $q = 26.7$
Find p

19) In $\triangle PKH$, $m\angle P = 89°$, $h = 29$, $k = 14$
Find p

20) In $\triangle RPQ$, $q = 21$, $p = 19$, $m\angle R = 97°$
Find r

21) In $\triangle ZXY$, $y = 17$, $x = 11$, $m\angle Z = 119°$
Find z

22) In $\triangle ABC$, $m\angle A = 130°$, $b = 29$, $c = 25$
Find a

23) In $\triangle RST$, $m\angle R = 127°$, $t = 10$, $s = 9$
Find r

24) In $\triangle RST$, $t = 14$, $s = 23$, $m\angle R = 18°$
Find r

25) In $\triangle QRP$, $m\angle Q = 127°$, $r = 20$, $p = 14$
Find $m\angle R$

26) In $\triangle ZXY$, $y = 24$, $m\angle Z = 123°$, $x = 18$
Find $m\angle X$

27) In $\triangle BCA$, $a = 23$, $m\angle B = 120°$, $c = 9$
Find $m\angle C$

28) In $\triangle RPQ$, $p = 28$, $q = 8$, $m\angle R = 89°$
Find $m\angle P$

29) In $\triangle RST$, $m\angle R = 87°$, $s = 26$, $t = 25$
Find $m\angle S$

30) In $\triangle DEF$, $m\angle D = 143°$, $f = 18$, $e = 21$
Find $m\angle E$

31) In $\triangle XYZ$, $z = 16$, $x = 15$, $y = 29$
Find $m\angle Z$

32) In $\triangle RPQ$, $p = 29.7$, $q = 22.2$, $r = 24.8$
Find $m\angle P$

33) In $\triangle PKH$, $k = 15$, $p = 23$, $h = 13$
Find $m\angle H$

34) In $\triangle KHP$, $k = 14.1$, $p = 19.5$, $h = 26.7$
Find $m\angle P$

35) In $\triangle STR$, $r = 19$, $s = 26$, $t = 12$
Find $m\angle T$

36) In $\triangle PQR$, $q = 12$, $r = 7$, $p = 6$
Find $m\angle Q$

AC of LOS (SSA). Find each measurement indicated. Round your answers to the nearest tenth.

37) In $\triangle KHP$, $m\angle K = 29°$, $p = 31$, $k = 20$
Find $m\angle P$

38) In $\triangle ZXY$, $m\angle Z = 47°$, $y = 24$, $z = 19$
Find $m\angle Y$

39) In $\triangle XYZ$, $m\angle X = 39°$, $z = 35$, $x = 33$
Find $m\angle Z$

40) In $\triangle PQR$, $m\angle P = 97°$, $r = 27$, $p = 26$
Find $m\angle R$

41) In $\triangle CAB$, $m\angle C = 35°$, $b = 32$, $c = 31$
Find $m\angle A$

42) In $\triangle RST$, $m\angle R = 39°$, $t = 5$, $r = 4$
Find $m\angle T$

43) In $\triangle ZXY$, $m\angle Z = 149°$, $y = 5$, $z = 11.6$
Find $m\angle Y$

44) In $\triangle FDE$, $m\angle F = 26°$, $e = 31$, $f = 25$
Find $m\angle E$

45) In $\triangle PQR$, $m\angle P = 134°$, $r = 35$, $p = 17$
Find $m\angle R$

46) In $\triangle XYZ$, $m\angle X = 112°$, $z = 8$, $x = 37.7$
Find $m\angle Z$

47) In $\triangle ZXY$, $m\angle Z = 28°$, $y = 23$, $z = 11$
Find $m\angle Y$

48) In $\triangle ABC$, $m\angle A = 16°$, $c = 20$, $a = 14$
Find $m\angle B$

Answers to Week 9 Practice - Ref. Ch. 6-1 & 6-2 (ID: 1)

1) 32

2) 19

3) 24

4) 17

5) 34.9

6) 37

7) 41

8) 17

9) 19.1

10) 16

11) 12

12) 21.1

13) 24.8

14) 31

15) 34

16) 37

17) 32

18) 10.3

19) 32

20) 30

21) 24.3

22) 49

23) 17

24) 10.6

25) 31.5°

26) 24°

27) 15.9°

28) 75°

29) 47.7°

30) 20°

31) 21.4°

32) 78.2°

33) 32°

34) 45.1°

35) 25.3°

36) 134.6°

37) 48.7° or 131.3°

38) 67.5° or 112.5°

39) 41.9° or 138.1°

40) Not a triangle

41) 108.7° or 1.3°

42) 51.9° or 128.1°

43) 12.8°

44) 32.9° or 147.1°

45) Not a triangle

46) 11.3°

47) 79° or 101°

48) 140.8° or 7.2°