*our new conjectures to solve Exercises 1–17.

1. $a = \underline{?}$ **65°** C-81

a
130°

2. $b = \underline{?}$ **30°** C-83 △ Sum

b 60°

p468

3. $c = \underline{?}$ ⓗ

green = 190°
190 - 120
70°
C-81

95°
c
120°

4. $h = \underline{?}$ ⓗ

C-74
△ Sum
def of arc measure
50°

50°
40° h

5. $d = \underline{?}$
$e = \underline{?}$
84° **42°** C-81
40°
96°
20°
140
84 180 - 96

d e

6. $f = \underline{?}$ **90°**
$g = \underline{?}$ **210°** C-85, 81
$g = 100°$ (210 - 110)
yellow arc = 210°

75° f
110° 105°

7. JUST is a rhombus.
$w = \underline{?}$

def of arc measure
VA
C-74
Quad Sum

J w 50° U
50 130 130
90 130 130
130°
T S

8. CALM is a rectangle. C-85
$x = \underline{?}$
360 - 64
2)296
148

M 52
x L
C
32° A

9. DOWN is a kite.
$y = \underline{?}$

C-77
= chords have ≅ arc
360
272
88/2 = 44°

D O
y
136° W
N

10. $k = \underline{?}$ C-81
142°
180 - 38 / 2
71°

k 38°

11. $r = \underline{?}$ **120°** C-81
$s = \underline{?}$
1/6 of circle = 60°
4·60 = 240°
½·240 =
120°

s
r

12. $m = \underline{?}$
$n = \underline{?}$ C-84, 83
m 180 - 40 = 140°
diameter
C-81
green ∠ = ½(40 + 98) = 69°
C-84 n = 180 - 69
(111°)

40°
n
98°

13. $\overline{AB} \parallel \overline{CD}$ C-85
$p = \underline{?}$ **71°**
$q = \underline{?}$ **41°** 180 - 98 / 2
120
$\overparen{AC} = \overparen{BD}$
71° 360 - 120 - 98 =
142/2 =
71°

A 120° B
P
98°
C q D
98

14. What is the sum of $a, b,$ $c, d,$ and e? ⓗ **180°**

a
e
d b
c

#15: 75°

#16: the ∠'s should be ≅ (C-82)