# Final Review – Chapter 7

## Part A

1) Rays *r* and *s* are tangents. w =\_\_\_\_\_



3)  $m\widehat{XM} = 80^{\circ}$   $m\angle XNM = \_$   $m\widehat{XN} = \_$   $m\widehat{MN} = \_$ N



2)  $\overrightarrow{AB}$  is tangent to both circles and  $\overrightarrow{mAMC} = 295^\circ$ .  $m \angle BQX = \_$ 





6)  $\overline{AD}$  is a tangent.  $\overline{AC}$  is a diameter.



#### Part B

Leave your answers in terms of  $\pi$ .

1) If  $r = 10.5 \, cm$ , find C.

- 2) If  $C = 25\pi \, cm$ , find r.
- 3) If  $C = 9.6\pi \, cm$ , find d. 4) If  $d = 12 \, cm$ , find C.
- 5) What is the circumference of a circle whose radius is 30 cm?
- 6) What is the diameter of a circle whose circumference is  $24\pi$  cm?
- 7) A dinner plate fits snuggly in a square box with perimeter 48 inches. What is the circumference of the plate?

# Part C

Leave your answers in terms of  $\pi$ .

- **1.** Length of  $\widehat{AB} =$ \_\_\_\_\_
- **4.** Length of  $\widehat{XY} =$ \_\_\_\_\_



**7.** The diameter is 40. Length of  $\widehat{AC} =$ \_\_\_\_\_



2. The circumference is  $24\pi$ and  $\widehat{mCD} = 60^{\circ}$ . Length of  $\widehat{CD} = \_$ 



**5.** The radius is 20. Length of  $\widehat{AB} = \underline{\qquad}$ 



**8.** The length of  $\widehat{XY}$  is  $14\pi$ . Diameter = \_\_\_\_\_



**3.** The length of  $\widehat{EF}$  is  $5\pi$ . Radius = \_\_\_\_\_



**6.** The circumference is  $25\pi$ . Length of  $\widehat{AB} =$  \_\_\_\_\_



**9.** Length of  $\widehat{AB} =$ \_\_\_\_\_



## Part D

Match each geometric construction with its figure.

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1.	Construction of a perpendicular through a point				
	on a line				
2.	Construction of a line parallel to a given line through a given point not on the line	a.	b.	° At	d.
3.	Construction of a perpendicular bisector		+	A	$\square$
4.	Construction of an angle bisector	e. 👉	f.	g.	h. 7
5.	Construction of a perpendicular from a point to a line.				
6.	Construction of an equilateral triangle	L AV	∠ j. j_	k.	l t
7.	Construction of an altitude in a triangle				
8.	Construction of a circumcenter	<i>*</i>	×		*
9.	Construction of an incenter				
10.	Construction of a 45° angle				