9-1 Circles and Arcs

Name: _____   Time› Start: _____   Finish: _____   Total Time = _____
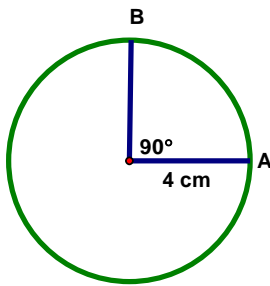
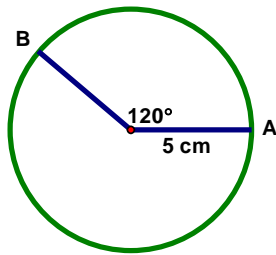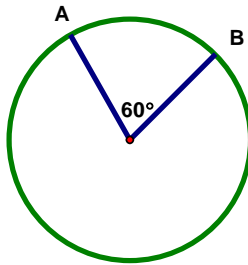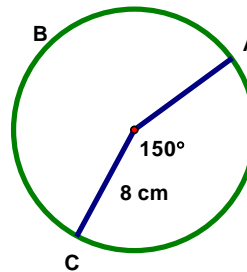| Figure 1	Figure 2	Figure 3	Figure 4	Figure 5

Figure 1 — B, 90°, 4 cm, A
Figure 2 — B, 120°, 5 cm, A
Figure 3 — A, 60°, B
Figure 4 — B, A, 150°, 8 cm, C
Figure 5 — A, C, B
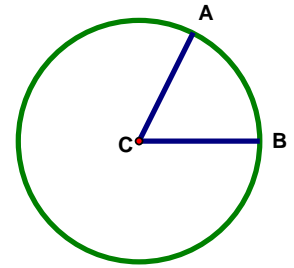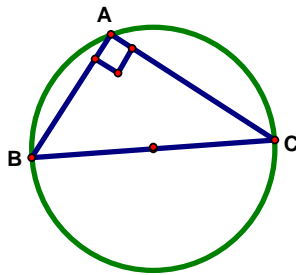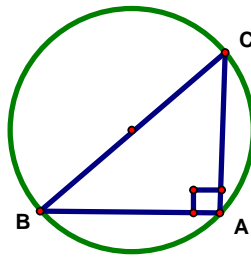
Figure 6	Figure 7	Figure 8	Figure 9	Figure 10

Figure 6 — A, B, C
Figure 7 — C, B, A
Figure 8 — B, A
Figure 9 — A, E, D, C, B
Figure 10 — A, D, E, F, C, B
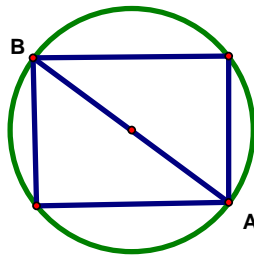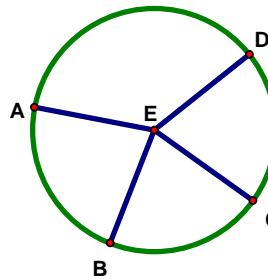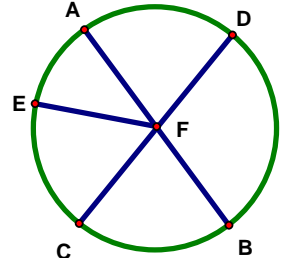
_____ 1. What is the measurement of AB in Figure 1 above?

_____ 2. What is the measurement of AB in Figure 2 above?

_____ 3. If $AB = 5$ cm in Figure 3 above, what is the circumference of the circle?

_____ 4. What is the measurement of major ABC in Figure 4 above?

_____ 5. In Figure 5 above, $AB = 5$ cm while the circumference of the circle is 40 cm.
What is the measurement of $\angle ACB$?

_____ 6. In Figure 6, AB = 3 cm and AC = 4cm. What is the **exact** circumference of the circle?

_____ 7. In Figure 7, AB = 5 cm and AC = 12 cm. What is the **exact** circumference of the circle?

_____ 8. In Figure 8, a square with a perimeter of 48 is inscribed in the circle.
If $\overline{AB}$ is the diameter, what is $\overline{AB}'s$ length?

_____ 9. In Figure 9, $\angle AED = 12x$, $\angle AEB = 8x$, $\angle CED = 8x$, and $\angle CEB = 4x$.
What is the value of x?

_____ 10. In Figure 10, $\overline{AB}$ and $\overline{CD}$ are diameters of circle F. If $\angle CFE = 4x$, $\angle AFE = 2x$, and
$\angle CFB = 3x$, what is the value of x?

SAT Questions – All have videos

_____ Trig 1-5   21. Which of the following is equal to $(7^8 \times 7^9)^{10}$?

   A. 7^{27} B. 7^{82} C. 7^{170} D. 49^{170} E. 49^{720}

_____ Trig 1-5   22. If a certain number is doubled and the result is increased by 7, the number obtained is 19. What is the original number?

_____ Trig 1-5   23. If the average (arithmetic mean) of x, 5x, and 6x is 8, what is the value x?
       A. 1   B. 2   C. 3   D. 4   E. 5

_____ Trig 1-5   24. If $4(x + 3) = 15$, then what is the value of $4x + 3$?