Lesson 3.2 Practice: Radian Measure

School Launch · Trigonometry · Unit 3: Angles, Radians and the Unit Circle · Worksheet A

Scientific calculator

Name _____ Date _____ Score _____ / 10

Show your work under each problem, one step per line, and check your answer. Word problems: name the unknown, write the equation, solve, and answer in a sentence with units.

1. An arc of length 50 cm subtends a central angle in a circle of radius 12 cm. Find the angle in radians (exact) and degrees (nearest tenth). EASY

2. An arc of length 21 cm subtends a central angle in a circle of radius 9 cm. Find the angle in radians (exact) and degrees (nearest tenth). EASY

3. An arc of length 56 cm subtends a central angle in a circle of radius 12 cm. Find the angle in radians (exact) and degrees (nearest tenth). EASY

4. An arc of length 9 cm subtends a central angle in a circle of radius 13 cm. Find the angle in radians (exact) and degrees (nearest tenth). MEDIUM

5. An arc of length 8 cm subtends a central angle in a circle of radius 11 cm. Find the angle in radians (exact) and degrees (nearest tenth). MEDIUM

6. An arc of length 14 cm subtends a central angle in a circle of radius 2 cm. Find the angle in radians (exact) and degrees (nearest tenth). MEDIUM

7. An arc of length 39 cm subtends a central angle in a circle of radius 13 cm. Find the angle in radians (exact) and degrees (nearest tenth). MEDIUM

8. An arc of length 33 cm subtends a central angle in a circle of radius 5 cm. Find the angle in radians (exact) and degrees (nearest tenth). HARD

9. An arc of length 53 cm subtends a central angle in a circle of radius 19 cm. Find the angle in radians (exact) and degrees (nearest tenth). HARD

10. An arc of length 57 cm subtends a central angle in a circle of radius 4 cm. Find the angle in radians (exact) and degrees (nearest tenth). HARD