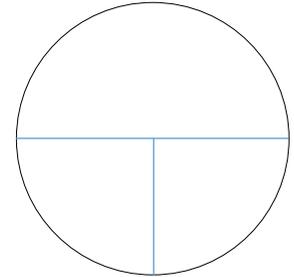


American Institute of Organ Builders

Practice Examination, Tonal

*Please note that for credit to be issued, mathematical questions must show equations and work.

1. If the circle has a diameter of 155.5 mm:
 - a. Radius = _____
 - b. Circumference = _____



2. If the circle has a circumference of 267 mm:
 - a. Diameter = _____
 - b. Radius = _____
 - c. Area = _____

3. If the circle has a diameter of 155.5 mm, what would the resulting mouth width be for the following:
 - a. $2/9 =$ _____
 - b. $1/4 =$ _____
 - c. $1/5 =$ _____

4. Using Normalmensur, you are provided a pipe with a diameter of 148.9 mm @ #1, what is the diameter of note #17? _____

5. What is the diameter of note #18? _____

6. Provide an acceptable mixture layout for a Mixture III starting on $1-1/3$.

7. You are given a Mixture based on 2' Pitch with the quint being 2 notes smaller, and are told it follows a scale of 48 @ 8'.

What is the diameter of Note 1, Rank 1? _____

What is the diameter of Note 1, Rank 2? _____

8. A rectangle has an inside measurement of 101.6 mm X 127 mm. What is the area? _____

9. Based on the area, what are the following dimensions of a circle that has the same area as a rectangle with the measurements of 57 mm x 74 mm?
 - a. Circumference = _____
 - b. Diameter = _____

10. A Great division of an organ has 8' Principal, 4' Octave, 2' Principal, what would be an appropriate Mixture III composition?
11. If the Great division was 8' Principal, 4' Octave, 2' Blockflote, what would be an appropriate Mixture IV composition?
12. What is the frequency of Concert Pitch? _____
13. What is the frequency of the octave above Concert Pitch? _____
14. Please Identify the appropriate stop names for the following NM stop list:
- a. 8', H.T. ± 0 _____
 - b. 8', H.T. -4 _____
 - c. 4', H.T. -2 _____
 - d. 4', H.T. -1 _____
 - e. 2', H.T. -3 _____
15. *Based on the above stop list, provide an appropriate 8' reed stop and scale for this division:
- a. Stop Name: _____
 - b. Scale: _____

16. From the plate on the right, name the following reed components:

- a. E = _____
- b. A = _____
- c. G = _____
- d. I = _____
- e. H = _____

