## APPENDIX R
### Basic Math Skills Test

![Calculator](image)

### Calculator Functions

<table>
<thead>
<tr>
<th>+</th>
<th>= Add</th>
</tr>
</thead>
<tbody>
<tr>
<td>-</td>
<td>= Subtract or Takeaway</td>
</tr>
<tr>
<td>÷</td>
<td>= Divide</td>
</tr>
<tr>
<td>x</td>
<td>= Multiply</td>
</tr>
</tbody>
</table>

This basic math skills test is designed to help you test your basic math knowledge that you will be required to perform as a certified operator. This is also your chance to make sure that you are familiar with using a calculator. Complete this test before you move on to the next section. The answers to these basic math questions are found on the next page but try not to look until you have completed all the questions. Your NSPF instructor may ask to see your answers to these questions at the beginning of your CPO® Certification course. Simply circle your answer choice.

1. **Add:** $2.32 + 71.4 + 0.003 =
   - (a) 73.75
   - (b) 94.9
   - (c) 9.49
   - (d) 73.723

2. **Add:** $7.4 + 0.7 + 1.7 + 1.9 =
   - (a) 11.5
   - (b) 11.7
   - (c) 12.1
   - (d) 11.9

3. **Subtract:** $7,527 - 149 =
   - (a) 7,378
   - (b) 7,478
   - (c) 7,388
   - (d) 7,488

4. **Subtract:** $11.7 - 12.1 =
   - (a) +0.4
   - (b) +1.1
   - (c) -0.4
   - (d) +0.4

5. **Add and Subtract:**
   
   $7.2 + 0.9 + 1.8 + 1.6 - 12.2 =
   - (a) +0.7
   - (b) +23.7
   - (c) -1.7
   - (d) -0.7

6. **Multiply:** $300 \times 7.48 =
   - (a) 2,144
   - (b) 2,244
   - (c) 40.106
   - (d) 292.52

7. **Multiply:** $25 \times 75 =
   - (a) 1875
   - (b) 2875
   - (c) 18,750
   - (d) 187.5
8. **Divide:** \(200,000 \div 10,000 =\)  
   (a) 2000  
   (b) 200  
   (c) 20  
   (d) 40  

9. **Divide:** \(75,000 \div 10,000 =\)  
   (a) 7.5  
   (b) 7.0  
   (c) 75  
   (d) 10  

10. You have a pool that is 60 feet in length and 30 feet in width. How many square feet of surface area does this pool have:  
    (a) 2,800 square feet  
    (b) 3,600 square feet  
    (c) 6,000 square feet  
    (d) 1,800 square feet  

11. The volume of your pool is 328,637 gallons. What is the volume rounded to the nearest thousand?  
    (a) 328  
    (b) 329  
    (c) 329,000  
    (d) 328,000  

12. The current chlorine reading in your pool is 1.5 ppm. You want to raise it to 3.0 ppm. How many more ppm of chlorine do you need to add?  
    (a) 4.5 ppm  
    (b) 3.0 ppm  
    (c) 1.5 ppm  
    (d) 2.0 ppm  

13. How many cubic yards of concrete are needed to make a cement floor of a spa that 9 feet x 12 feet and 6 inches thick?  
    (a) 2  
    (b) 4  
    (c) 18  
    (d) 54  

14. Your pool slopes from 3.5 feet to 6.5 feet. What is the average depth of this pool?  
    (a) 10 feet  
    (b) 5 feet  
    (c) 22.75 feet  
    (d) 3 feet  

15. There is a leak in your pool and it loses 2.5 inches of water each day. It takes 1235 gallons for each inch of water in your 60 feet x 30 feet pool. How many gallons do you need to add to your pool each day?  
    (a) 494 gallons  
    (b) 37,050 gallons  
    (c) 4,500 gallons  
    (d) 3,087.5 gallons  

16. The diameter of a spa is 24 feet. What is the radius?  
    (a) 6 feet  
    (b) 18 feet  
    (c) 12 feet  
    (d) 24 feet