***MAP4C – Algebra Practice for Playdoh/Water/Paper Problems***

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| **SHAPE** | **SURFACE AREA** | **VOLUME** | **SHAPE** | **PERIMETER** | **AREA** |
| Sphere |  |  | Circle |  |  |
| Cylinder |  |  | Square | (s=side length) |  |
| Cube | (b=side length)  |  |

In each case, use the appropriate formula to solve for the missing dimension.

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| Shape: Circle | Given: C = 30 cm | Find: r | Shape: Circle | Given: Area = 50 cm2 | Find: r |
| 1.
 |  |
| Shape: Square | Given: Perimeter = 30cm | Find: side length | Shape: Square | Given: Area = 60 cm2 | Find: side length |
| 1.
 |  |
| Shape: Cylinder | Given: r = 6 cmV = 2000 cm3 | Find: h | Shape: Cylinder | Given: h = 20 cmV = 1500 cm3 | Find: r |
| 1.
 |  |
| Shape: Cube | Given V = 4000 cm3 | Find: side length | Shape: Cube | Given: surface area = 700 cm2 | Find: side length |
| 1.
 |  |
| Shape: Sphere | Given: V = 200 cm3 | Find: radius | Shape: Sphere | Given: surface area = 1000 cm3 | Find: radius |
| 1.
 |  |
| Shape: Cylinder | Given: r = 7 cm,S.A. = 500 cm2 | Find: height | Shape: Cylinder | Given: h = 10 cmS.A. = 2000 cm2 | Find: radius |
| 1.
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***All done? Try these…***


**ANSWERS (I think)**

1. **R=4.8cm**
2. **R=4.0cm**
3. **S=7.5cm**
4. **B=7.7cm**
5. **H=17.7cm**
6. **R=4.9cm**
7. **B=15.9cm**
8. **B=10.8cm**
9. **R=3.6cm**
10. **R=8.9cm**
11. **H=4.4cm**
12. **R=?**