***MAP4C – Optimization Skills Practice*** Name: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_





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| 1. Calculate the volume of a cylinder with a radius of 6 cm and a height of 11 cm.
 | 1. Calculate the surface area of a box with base (b) of 7 cm and a height of 4 cm
 |
| 1. If a box has a base (b) of 9 cm and a volume of 760 cm3, what is its height?
 | 1. If a box has a base (b) of 6.5 cm and a surface area of 250 cm2, what is its height?
 |
| 1. If a cylinder has a radius of 3 cm and a surface area of 400 cm2, what is its height?
 | 1. \*\*\*If a box has a height of 8 cm and a surface area of 500 cm2, what is its radius?
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ANSWERS

1. V=1244.1 cm3
2. SA = 210 cm2
3. H = 9.4 cm
4. H = 6.4 cm
5. H = 18.3 cm
6. R = 5.8 cm or r = -10.8 cm