1. Find the **volume** of the following solids.



a) b)  c)

d) e) f)

1. Find the **surface area** of the following solids.

a) b) Note: 4.5m is the radius here



3) Find the volume of the following 3D shapes.

|  |  |  |
| --- | --- | --- |
| Solid #1 | Basic Shape 1 | Basic Shape 2 |
| Sketch: |  |  |
| Volume =  | Volume =  |
| Total Volume =  |

4) Bort is taking a glass blowing course, and is designing two glasses. Find the volume of each glass.

Glass 1: Cylinder



|  |  |  |
| --- | --- | --- |
| Glass 2: Cylinder and Half a Sphere | Basic Shape 1 | Basic Shape 2 |
| Sketch: |  |  |
| Volume =  | Volume =  |
| Total Volume =  |

5) The dimensions of an irregularly shaped pool are shown in the diagram below.

a) Find the area of the pool surface:

|  |
| --- |
| Diagram of Pool Surface |
|  |
| Basic Shape #1 | Basic Shape #2 | Basic Shape #3 |
|  |  |  |
| Area = | Area = |  |
| Total Area = |

b) The pool is 6 feet deep. Use the formula: $V\_{prism}=Area of Base ×Height of Prism$ to find the volume of the entire pool.

c) Your backyard hose can pump out 1.2 feet3 of water every minute. How many minutes will it take to fill your pool?