REVIEW: 3D Geometry

Name:_____

Accelerated 7th Grade Math

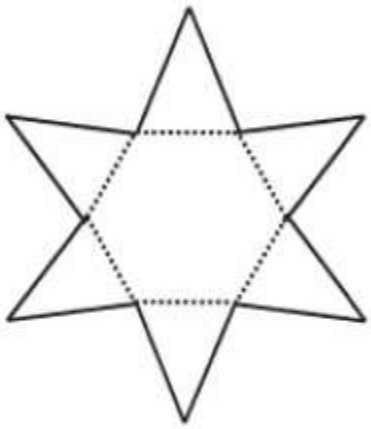
Draw the following 3-D shapes

1) pentagonal pyramid

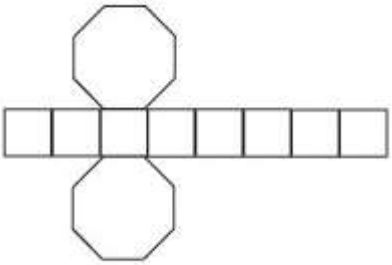
2) triangular prism

Name the following figures

3)



4)



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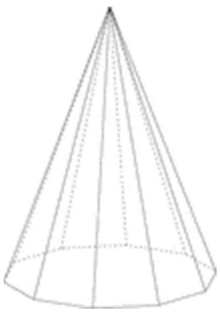

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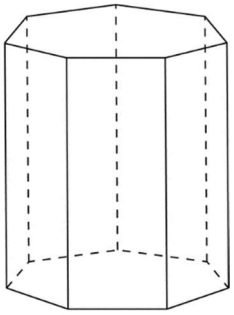
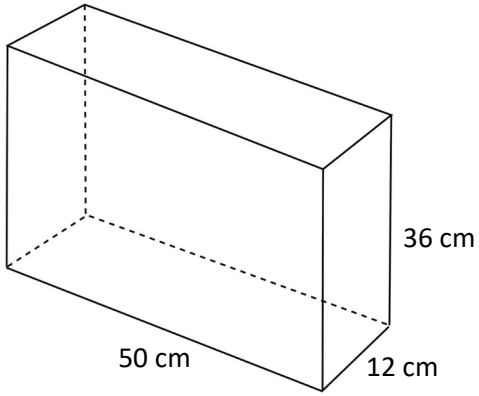


For #7 – 15, find the **surface area** AND **volume** of the following shapes. Show all of your work and include units with your answer!

7)



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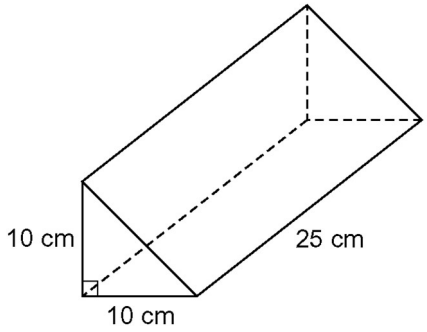

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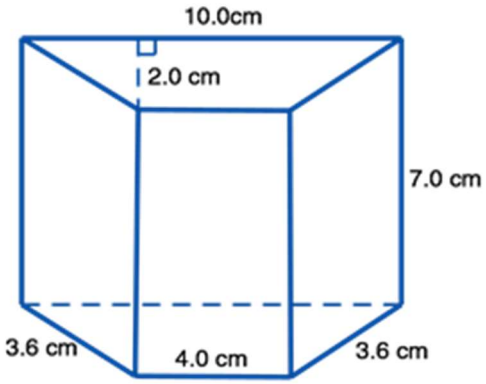

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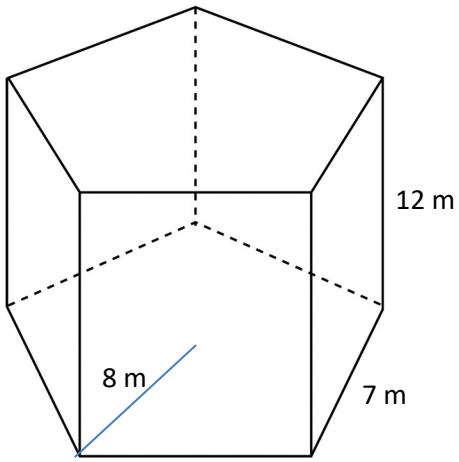

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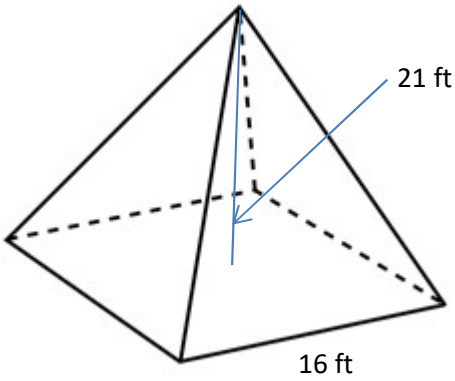

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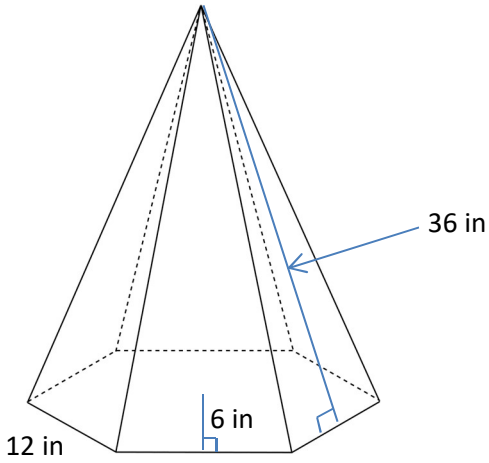

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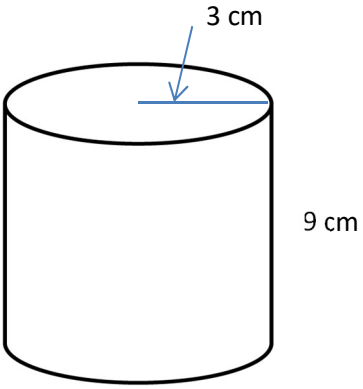

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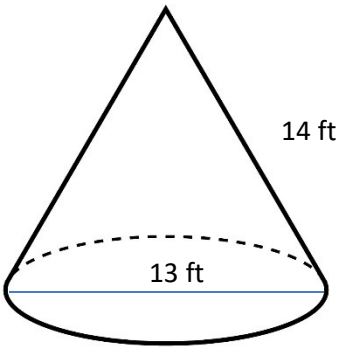

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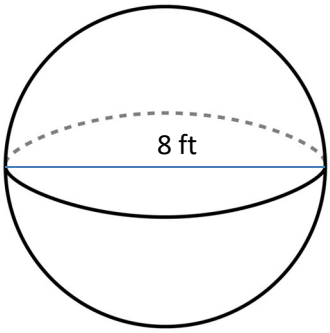
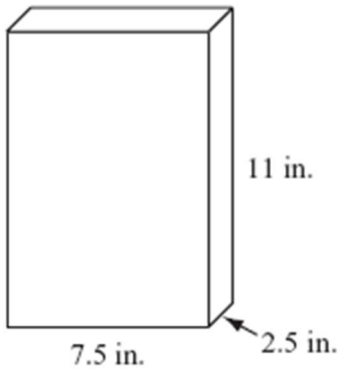


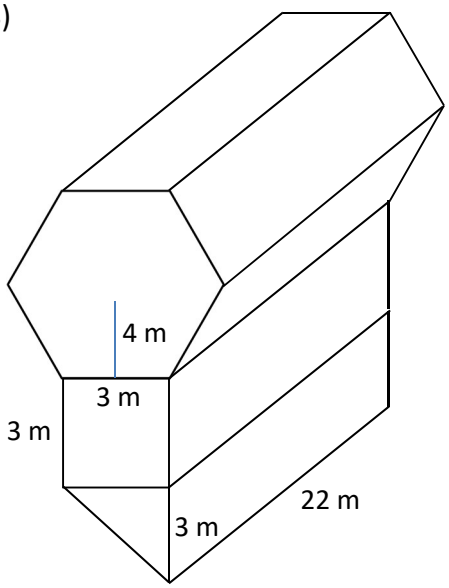
16) Farmer Jones is going to buy a water tank. Find how much water it will hold if it is a rectangular prism with a height of 10 feet, a length of 4 feet, and a width of 7 feet.

17) You are going to wrap the following box with pretty pink paper. How much paper will you need?

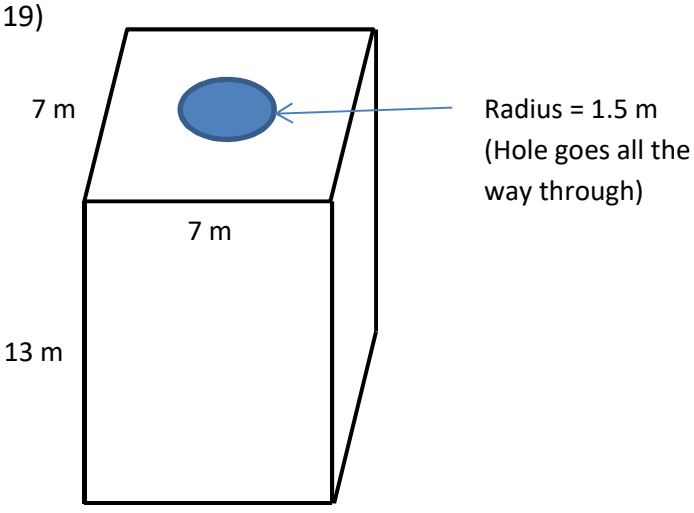


Find the surface area and volume for #18 – 19.

18)

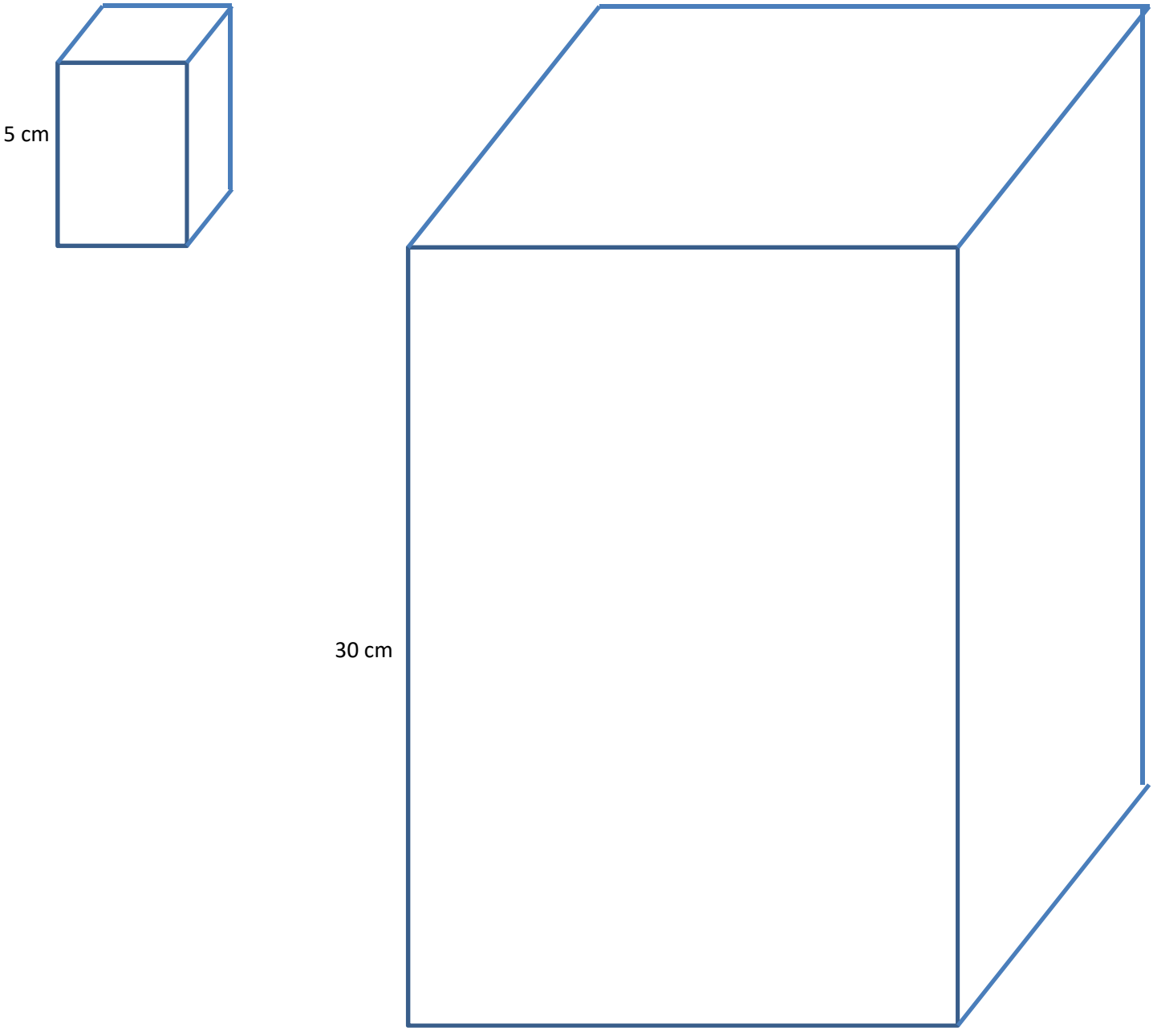


19)

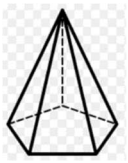
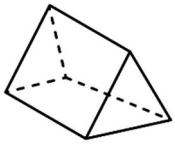


20) A can of soup has a surface area of 125 in^2 and a volume of 240 in^3. They sell another can that is 4 times larger in every dimension. Find the surface area and volume of the larger can. SHOW WORK!

21) The surface area of the smaller box is 400 in^2 and the volume of the smaller box is 650 in^3. Find the surface area and volume of the larger box. SHOW WORK! (The prisms are similar)



3D Geometry Test Review Answers – 7th Accelerated Math

1. 
2. 
3. Hexagonal pyramid
4. Octagonal prism
5. Decagonal Pyramid
6. Heptagonal prism
7. SA = 5664 cm^2 V = 21,600 cm^3
8. SA = 953.5 cm^2 V = 1250 cm^3
9. SA = 176.4 cm^2 V = 98 cm^3
10. SA = 671.65 cm^2 V = 1509.9 cm^3
11. SA = 975.04 ft^2 V = 1792 ft^3
12. SA = 1512 in^2 V = 2556 in^3
13. SA = 226.08 cm^2 V = 254.34 cm^3
14. SA = 418.41 ft^2 V = 548.35 ft^3
15. SA = 200.96 ft^2 V = 267.95 ft^3
16. 280 ft^3
17. 257.5 in^2
18. SA = 720.28 m^2 V = 1089 m^3
19. SA = 570.33 m^2 V = 545.155 m^3
20. SA = 2000 in^2 V = 15,360 in^3
21. SA = 14,400 cm^2 V = 140,400 cm^3