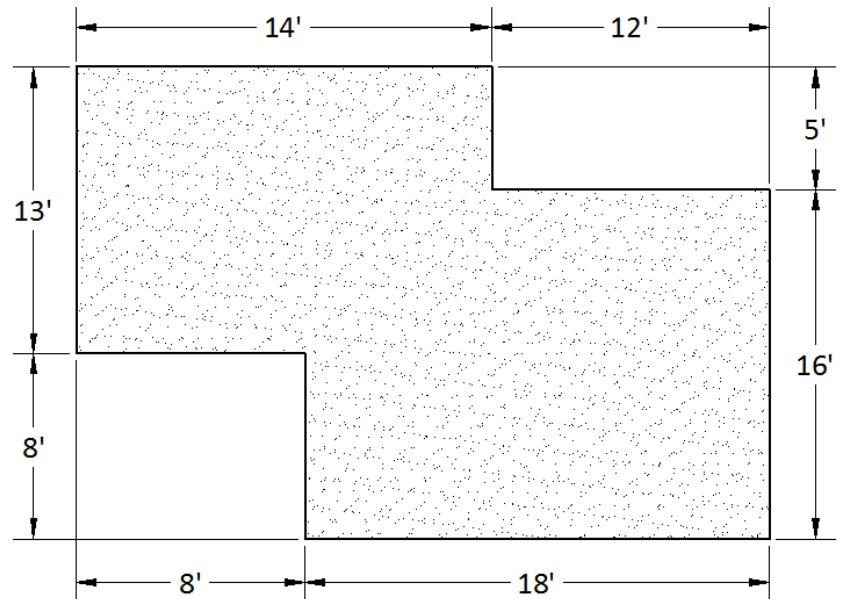Math 63 Chapter 4 Review
- Calculators are allowed but show your steps and box your final answer.
- Include the correct unit with your answer.

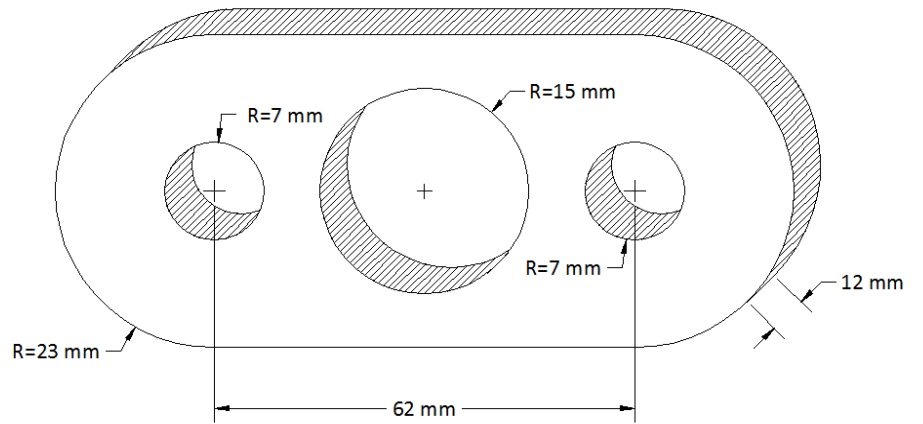1. Calculate the shaded area of the floor.

2. Calculate the number of 2" x 2" tiles that it will take to cover the floor.

3. Calculate the number of lineal feet of 8" wide hardwood that it will take to cover the floor.

4. Calculate the perimeter of the floor.
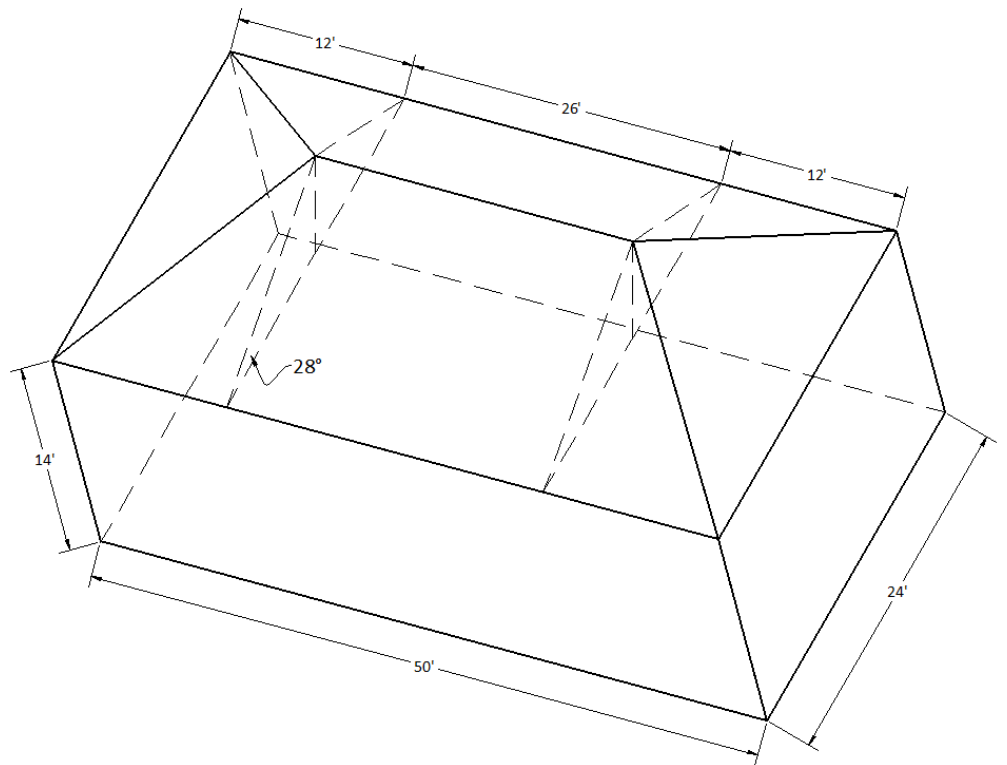
5. Calculate the volume of the steel plate in cm³.

6. Calculate the surface area of the steel plate in cm².

7. Use the steel design table to calculate the weight of the steel plate in grams.

8. Calculate the weight of the part if it is made of wood weighing 13 ounces per cubic inch. Answer in pounds.
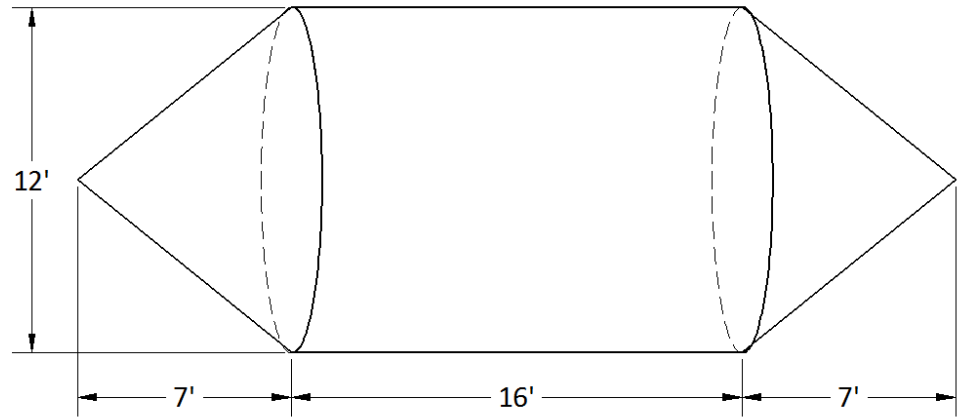
9. Calculate the volume of the house (including the roof). Hint: You will need to calculate the height of the roof using trigonometry.

12'

26'

12'

28°

14'

24'

50'

10. Calculate the surface area of the house (all outside surfaces including the bottom).

11. Calculate the total length of the 9 lines that define the roof.
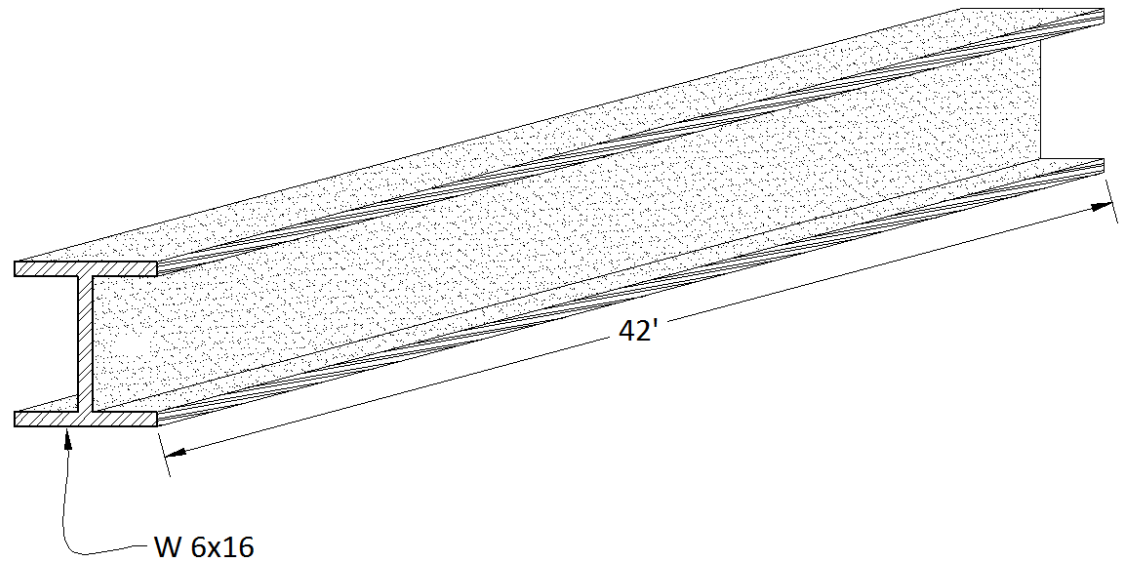
12. Calculate the volume of tank in cubic yards.

12'

7'   16'   7'

13. Calculate the surface area of the tank.

14. Calculate the weight of the empty tank if it is made of ½" thick steel. Answer in tons.

15. Calculate the weight of the tank full of water.   Answer in tons.

16. Use the steel design table to find the volume of the I-beam.

42'

W 6x16

17. Find the surface area of the I-beam. Answer in ft^2.

18. Find the weight of the I-beam in pounds.