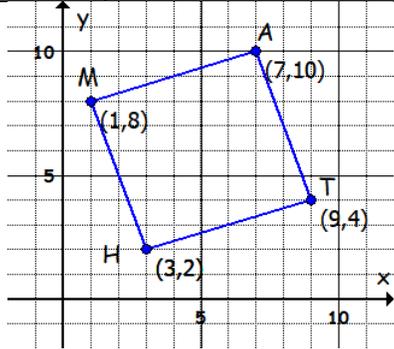


C-Level

Unit 6

1. Complete the table. Show your work.



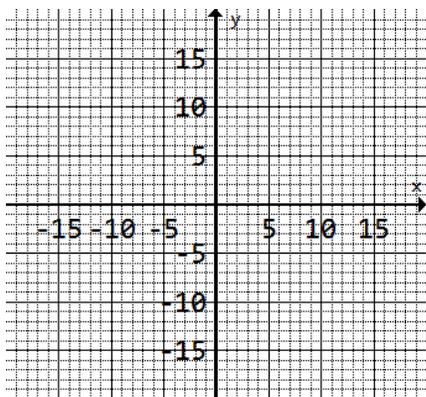
Diagonal midpoints	Diagonal slopes	Diagonal lengths

Type of quadrilateral?

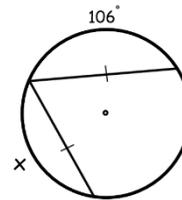
Find the area of MATH.

Unit 7

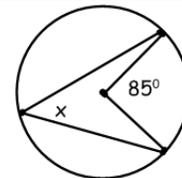
2. $x^2 - 10x + 25 + y^2 - 4y + 4 = 49$
 Equation: _____
 Center: _____ Radius: _____



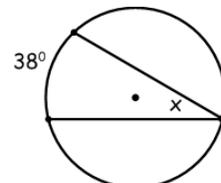
3. $X =$ _____



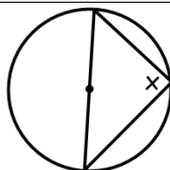
4. $x =$ _____



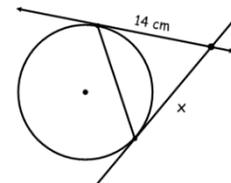
5. $x =$ _____



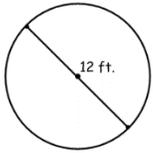
6. $x =$ _____



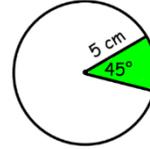
7. $x =$ _____



8. Find the exact circumference and area.



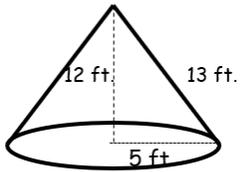
9. Find the exact arc length and area of the shaded sector.



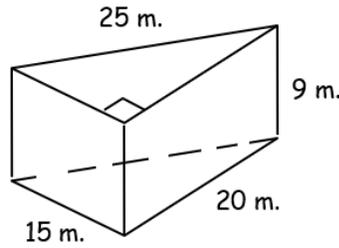
10. A park just installed a circular fountain 8 m. in diameter. The park wants to pave a 1.5 m. wide path around the fountain. How many square meters will they need to pave?

Unit 8 -- Find the volume of each solid.

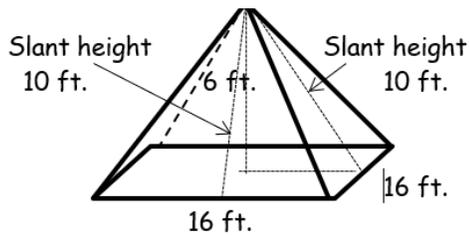
11.



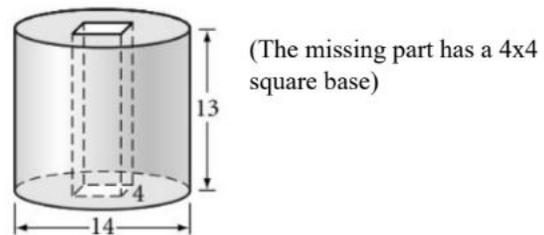
12.



13.



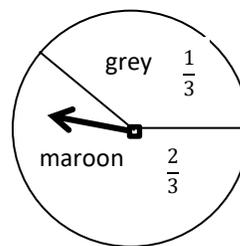
14. All measures are in m.



15. If the diameter of a student's brain is about 6 inches, and you assume its shape is approximately a hemisphere, then what is the volume of the student's brain?

Unit 9

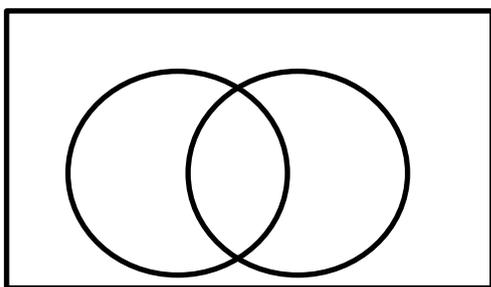
16. Make a tree diagram or area model to represent the outcomes if you spin the spinner on the right two times.



a. $P(\text{both grey}) =$	b. $P(\text{both maroon}) =$	c. $P(\text{maroon and grey}) =$
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17. The school newspaper reports that 54% of high school students love to read, 74% love chocolate ice cream, and 39% love to read and chocolate ice cream.

a. Draw a Venn diagram.



b. Create a two-way table.

a. $P(\text{chocolate ice cream}) =$

b. $P(\text{read} \cap \text{chocolate ice cream}) =$

c. $P(\text{read}) =$

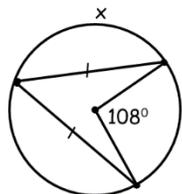
d. $P(\text{read} \cup \text{chocolate ice cream}) =$

e. $P(\text{read} \mid \text{chocolate ice cream}) =$

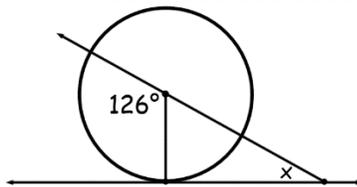
f. $P(\text{chocolate ice cream} \mid \text{read}) =$

B-Level

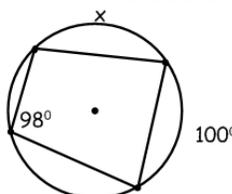
18.



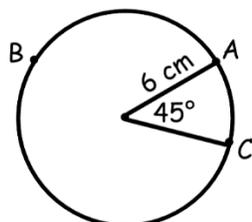
19. $x =$ _____



20. $x =$ _____

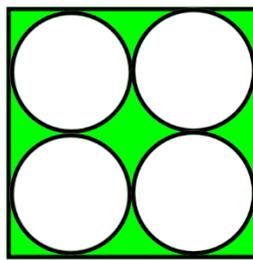
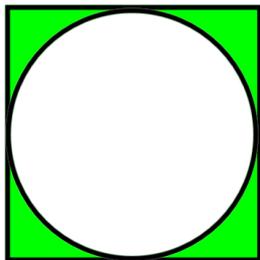


21. Find the exact arc length of \widehat{ABC} and the exact area of the sector bound by \widehat{ABC}



22. Find the radius of a cylinder with height of 10 in. and volume of 250π cu. in.

23. Both squares have side lengths of 12 cm. What is the area of the shaded region in each figure?



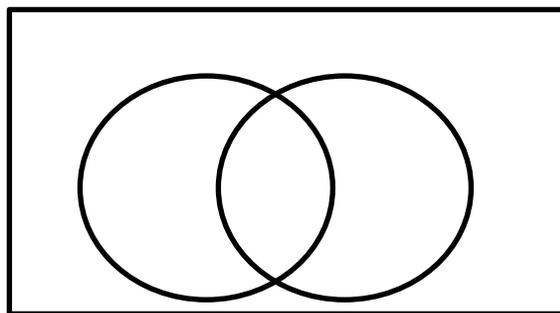
What percentage of the area of each square is shaded?

24. A survey found that 36% of city residents have a car, 53% of city residents have a tri-met pass, and 76% of city residents have either a car or tri-met pass.

a. complete the diagram

b. $P(\text{car} \cap \text{tri-met pass}) =$

c. $P(\text{car} \cup \text{tri-met pass}) =$



A-Level

25. A circle has a sector with an area of 50 square inches. The corresponding central angle in this sector is 110° . Draw the circle and sector, then find its radius.

26. Find the exact volume of the prism:

