MasterMath

7th Grade 3rd Quarter Exam

CUCC; You may use a calculator.

Closed Book; 45 minutes to complete

Volume Formulas

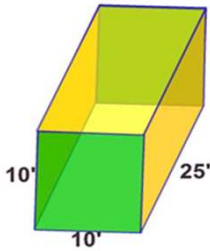Rectangular Prism = bwh

Triangular Prism = Bh
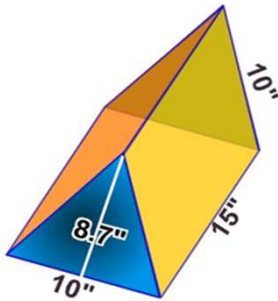
Cylinder = $\pi r^2 h$

Pyramid = 1/3Bh

Cone = 1/3Bh

B = area of base

Formulas	
Cone	S.A. = 1/2(2πr)l + πr^2
Circle	A = πr2
Circle	C = 2πr
Rectangle	A = bh
Triangle	A = 1/2 bh
π	$\pi \approx$ 3.14

1. **Determine the Surface Area of this figure.**

10'   25'   10'

2. **Determine the Surface Area of this figure.**

10"   15"   8.7"   10"

3. **Determine the Surface Area of this figure.**

24 cm   3 cm   12 cm
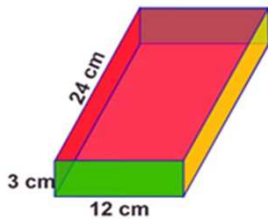
4. **Determine the Surface Area of this figure.**

Triangular Pyramid
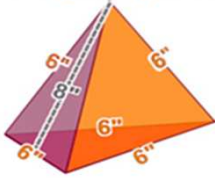
5. **Determine the Surface Area of this figure.**

11"

8"
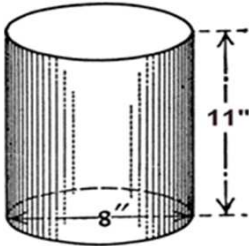
6. **Determine the Surface Area of this figure.**

7 cm

--3cm--
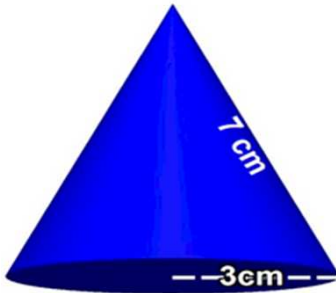
Shape	Surface Area	Notes
Cone	$1/2(2\pi r)l + \pi r^2$	πr^2= area of base
Cylinder	$2\pi rh + 2\pi r^2$	πr^2= area of base

7. **Determine the Surface Area of this figure.**
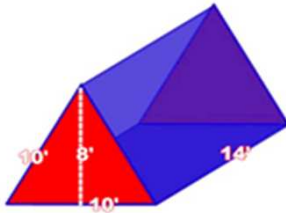
l = 20'

radius = 10'

height = 22'
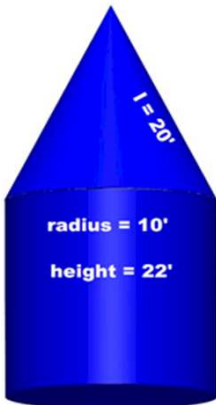
8. **True or false: the surface area of a composite figure is the sum of the surface areas of the individual figures that compose the composite figure.**

9. **What is the volume of this figure?**

11"
6"
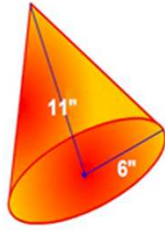
10. **What is the volume of this figure?**

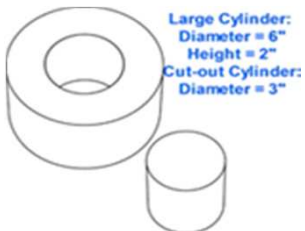10' 8'   14'
10'

11. **A rectangular prism has a base of 6 cm by 5 cm, and a height of 12 cm. What is the volume of this solid?**

12. **What is the volume of this figure?**

Pyramid height = 20'

<--20'-->

<--15'-->   <--15'-->

13. **What is the volume of this figure?**

Large Cylinder:
Diameter = 6"
Height = 2"
Cut-out Cylinder:
Diameter = 3"
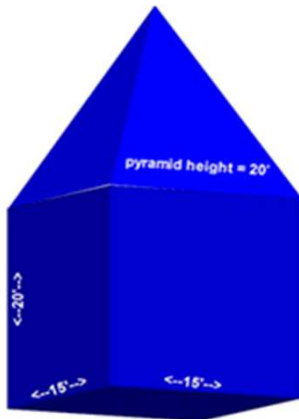
Based upon this Stem and Leaf Plot, answer questions 14-16

Height of basketball team in inches	
Stem	**Leaf**
6	6, 6, 8
7	1, 4, 8, 9, 9, 9
8	0, 1, 3, 4

14. What is the mean?

15. What is the median?

16. What is the mode?

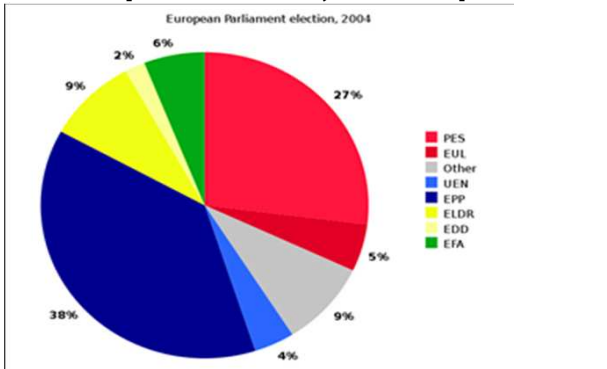**Based upon this chart, answer questions 17-19.**

Karen's Car Sales by Brand
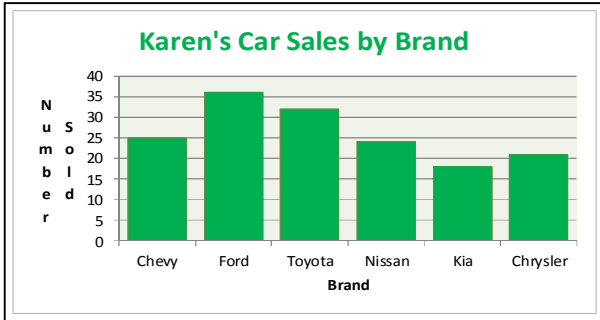
17. Is this a bar chart?

18. How many Chevys were sold?

19. The brand selling the fewest cars was

Based upon this chart, answer questions 20-22

European Parliament election, 2004

20. What party received 6% of the vote?

21. Which party received the most votes?

22. If there were 1,500,000 votes cast in this election, approximately how many votes did the UEN Party receive?

	Results		
%	?'s	Wrong	Concept
100%	1-3		
100%	4-6		
100%	7-8		
100%	9-11		
100%	12-13		
100%			
100%			
100%			
100%			
100%			
100%			
100%			
100%			
100%		0	