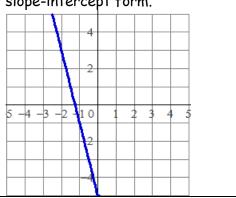
Unit 10 Review

ALGEBRA REVIEW: 1 point each.

- 1) Solve: $-3(-6+8m) \ge 4m+18$
- 2) Solve $-(m+6) \le -7 m$
- 3)Find the equation of the line in slope-intercept form.



4) Factor completely.

$$24x^2 + 90x + 54$$

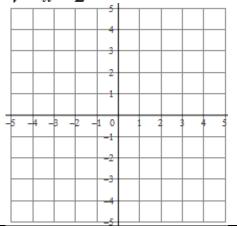
5) Factor completely.

$$3x^2 - 48$$

6) Solve the system by graphing.

$$y = -\frac{1}{2}x + 4$$

$$v = x - 2$$



Directions: Find the Surface Area and Volume of each. CHECK EACH FOR ROUNDING!

FIGURE	SURFACE AREA	VOLUME
7)		
12 yd 7 yd 8 yd 12 yd		

FIGURE	SURFACE AREA	VOLUME
8) 6 in 6 in	Round to nearest Tenth.	Round to nearest Tenth.
9) 6 cm 8 cm	Leave in Terms of π.	Leave in Terms of π.
FIGURE	SURFACE AREA	VOLUME
10) 8.5 cm 6 cm	Leave in Terms of π .	Leave in Terms of π.
10.4 mi	Round to nearest Tenth.	Round to nearest Tenth.

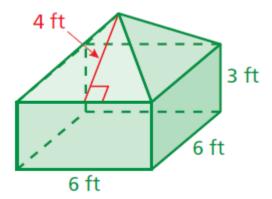
DIRECTIONS: Find the missing part.

12) A square pyramid has a surface area of 72 in² with a slant height of 3 in. What is the length of one side of the base?

- 13) A cylinder has a volume of 324π in³ with a height of 9 in. What's the length of the radius?
- 14) The volume of a cone is 64π and has a height of 12. What is the radius of the cone?
- 15) The surface area of a sphere is 144π in². What's the sphere's volume?

APPLICATION AND EXTENSION

16) Find the SURFACE AREA and VOLUME of the following composite solid. (5 POINTS)



17) Mr. Kelly finally bought his DREAM HOME...a real life house made of legos. He wanted to find out how many legos went into building the house. He knows the house is 30 feet long, 18 feet wide and 16 feet tall. He also knows that the dimensions of what shows on the surface for each lego is .2 feet by .15 feet. How many legos did it take to make the outside of the house? (hint...don't find the area of the ground as it was made of wood) (5 POINTS)