

Unit 10 Corrective Assignment

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Solve each inequality.

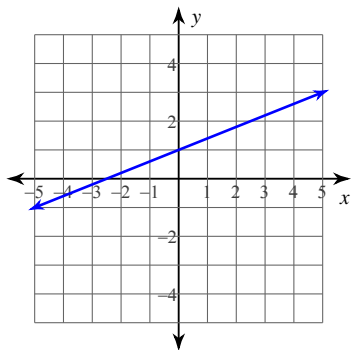
1) $-38 - 5b \leq -2(3 + 7b) - 7b$

Solve each equation.

2) $-28 - 4a = -3(1 - 7a)$

Write the slope-intercept form of the equation of each line.

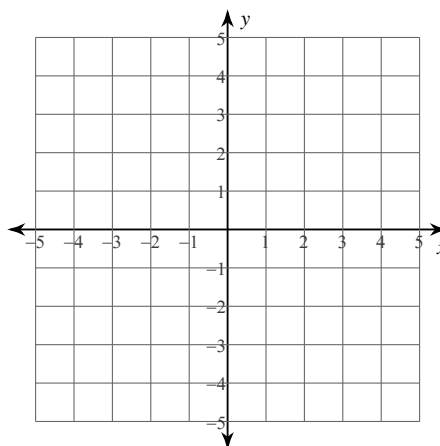
3)



Solve each system by graphing.

4) $y = \frac{5}{2}x + 2$

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



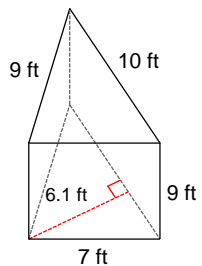
Factor each completely.

5) $45x^2 + 30x - 40$

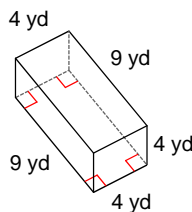
6) $4x^2 - 36$

Find the surface area and volume of each figure. Round to the nearest tenth.

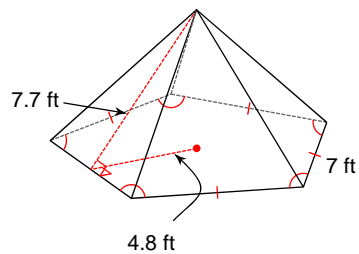
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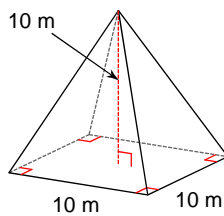
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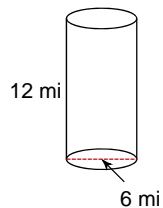
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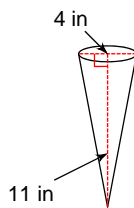
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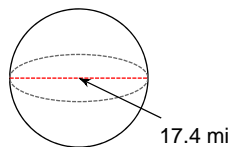
11)



12)



13)



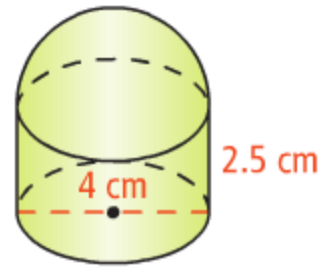
14) A square pyramid has a surface area of 84 cm^2 with a slant height of 4 inches. What is the length of one side of the base?

15) The volume of a cylinder is $135\pi \text{ cm}^3$. The height of the cylinder is 15 cm. What is the radius of the base of the cylinder?

16) The volume of a cone is 21π and has a height of 7. What is the radius of the base?

17) The surface area of a sphere is 100π square inches. What is the radius of the sphere?

18) Find the surface area and volume of the figure.



19) Mr. Sullivan and Mr. Kelly wanted to fill Mr. Brust's room with perfectly spherical balloons to congratulate him for winning Teacher of the Year. Each balloon had a radius of .5 feet (big balloons) and Mr. Brust's room was 15 feet long, 25 feet wide and 8 feet tall. How many balloons do they need?

ANSWERS:

1) $b \leq 2$ 2) $a = -1$ 3) $y = \frac{2}{5}x + 1$ 4) $(-2, -3)$ 5) $5(3x + 4)(3x - 2)$ 6) $4(x + 3)(x - 3)$

7) $SA = 295 \text{ ft}^2, V = 274.5 \text{ ft}^3$ 8) $SA = 176 \text{ yd}^2, V = 144 \text{ yd}^3$ 9) $SA = 218.75 \text{ ft}^2, V = 168.6 \text{ ft}^3$

10) $SA = 323.6 \text{ m}^2, V = 333.3 \text{ m}^3$ 11) $SA = 282.7 \text{ mi}^2, V = 339.3 \text{ mi}^3$ 12) $SA = 82.9 \text{ in}^2, V = 46.1 \text{ in}^3$

13) $SA = 951.1 \text{ mi}^2, V = 2758.3 \text{ mi}^3$ 14) 6 15) 3 16) 3 17) 5 18) $SA = 56.5 \text{ cm}^2, V = 64.9 \text{ cm}^3$

19) 5726 balloons