**Lesson 4: Independent Practice:**

Correct Me if I am Wrong!

Now it is your turn to find my mistakes! Check my work below to see if I have made any mistakes. If you find my mistake then correct it. Explain what mistakes I have made using appropriate math terms. If the problem is worked correctly then mark it as “correct”!

1. A ball has a radius of 4.5 inches. What is the surface area of the ball in terms of pi?

$$SA\_{sphere}=4πr^{2}$$

$$SA=4(π)(4.5^{2})$$

$$SA=4(π)(20.25)$$

$$SA=81π$$

1. A candy company is making cylindrical containers for their candy. If they want containers that are 3 inches tall and have a circumference of 2$π$ inches, how much material will it take to make one container?

$SA\_{cylinder}=2πrh+2πr^{2}$

$SA=2\left(3.14\right)\left(2\right)\left(3\right)+2(3.14)2^{2}$

$$SA=37.68+25.12$$

$$SA=62.8 in^{2}$$

1. The same candy company thought it may be cheaper to make the candy containers in the shape of a cone instead of a cylinder. Using the same circumference of $2π$ and a slant height of 3 inches, how much material is needed to make the cone-shaped containers?

$$SA\_{cone}=πrs+πr^{2}$$

$$SA=\left(3.14\right)\left(2\right)\left(3\right)+(3.14)(2^{2})$$

$$SA=18.84+4$$

$$SA=22.84 in^{2}$$

1. Dawn wants to use the labels from soup cans to make a poster for a can drive poster. Each of her soup cans measure 4 inches tall with a diameter of 2 inches. If she needs to cover a poster that is 12 inches by 12 inches, how many soup labels will she need?

$A\_{poster}=lw$ $SA\_{can}=2πrh+2πr^{2}$ SA poster $÷ $SA can

$A\_{poster}=12(12)$ $SA\_{can}=2(3.14)(1)(4)+2(3.14)(1^{2})$ $144 ÷31.4$

$A\_{poster=}144 in^{2}$ $SA\_{can}=25.12+6.28$ 4.58 cans $≈$ 5 cans

 $SA\_{can}=31.4 in^{2}$