

# SUPERSTARS III

*Pluto, IX*

Name: \_\_\_\_\_

*(This shows my own thinking.)*

- ★1. What is the smallest number of Blow Pops, and of which color, that you would have to add to a bowl full of pops containing 8 cherry and 8 sour apple so that the ratio of cherry to sour apple changes to 1 to 2?

Answer: \_\_\_\_\_

- ★★★★2. Use number sense to match each graph with the number of people at each location. Put the letter of each location in one of the four center circles.

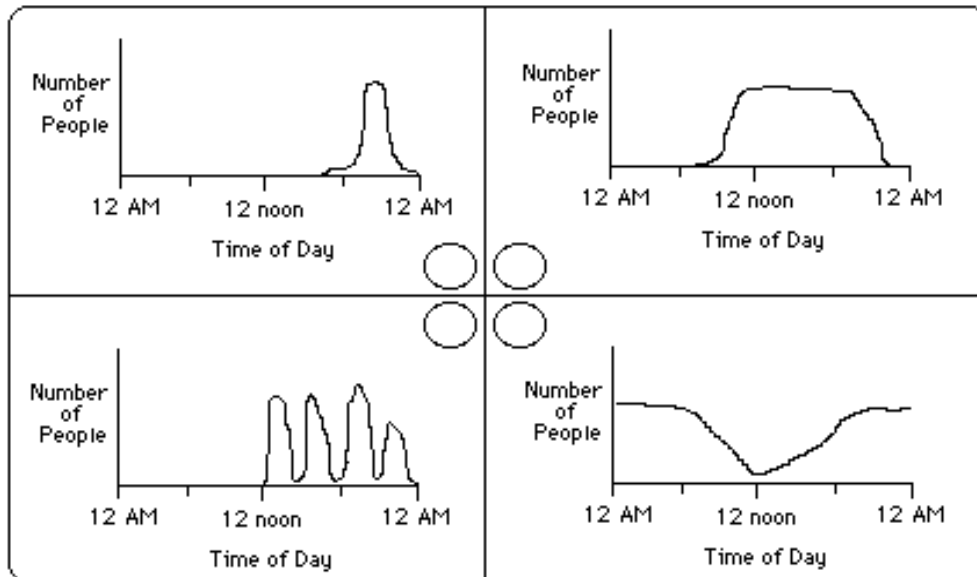
Locations:

A. motel

B. football stadium

C. movie theater

D. shopping mall



- ★★★3. Your Aunt Ada sent you a \$25 gift certificate for Camelot Music. You spot 2 CDs that you would like to have. One costs \$16.90 and the other is on special for \$13.10. What percent of the total cost will you have to pay with your own money?

Answer: \_\_\_\_\_%

- ★★★ 4. The Easter Bunny Academy just graduated 10 new Bunnies, complete with costumes, to work the local malls. As they prepare to leave for their duties at the mall, each bunny shakes hands with each of the other bunnies. How many handshakes will there be?

Answer: \_\_\_\_\_ handshakes

★★★5. Finish these number patterns out to the tenth position, and find the sum:

a.  $1 - 2 - 3 - 4 - 5 - 6 - \dots - 10 = \underline{\hspace{2cm}}$

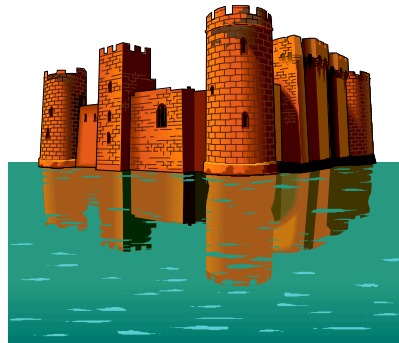
b.  $-100 + 90 - 80 + 70 - 60 + \dots + 10 = \underline{\hspace{2cm}}$

c.  $2 - 4 + 6 - 8 + 10 - 12 + \dots + 20 = \underline{\hspace{2cm}}$

★6. Given  $m = 43$  and  $n = 27$ , evaluate  $15m + 12n - 2m$ .

Answer:  $\underline{\hspace{2cm}}$

★★★7. While building a medieval castle it cost Sir Bedemere 36 guilders to hire 5 artists and 3 stone masons, or 28 guilders for 3 artists and 5 stone masons. What is the cost of each one?



Answer: An artist costs  $\underline{\hspace{2cm}}$       A mason costs  $\underline{\hspace{2cm}}$

★★★8. Kent needed to purchase a new step ladder. The ladder he wanted cost \$42.95 but Kent noticed that it was on sale for 25% off. The sales tax in his county is 6%. What will be the total cost of Kent's ladder?

Answer: \$  $\underline{\hspace{2cm}}$

★★9. What is the square root of the cube root of 729? Answer:  $\underline{\hspace{2cm}}$

★★10. On a number line, what is the coordinate of a point  $\frac{1}{3}$  the distance from -5 to 13?

Answer:  $\underline{\hspace{2cm}}$