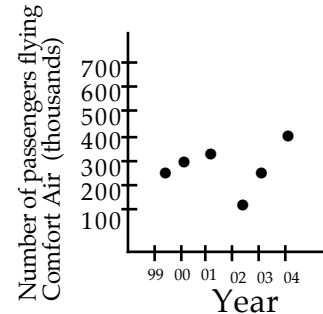


OHS scholars had a record year receiving scholarship money. Twelve students received awards, as follows: \$1000, \$1500, \$6000, \$1500, \$2500, \$2000, \$1000, \$4000, \$2500, \$2500, \$1000, \$3000. What is the best way to show this data to the public: a bar chart, circle chart, or box and whisker? Explain.

© Olympia High School (2004)

1

Comfort Airlines has not achieved the ridership it had experienced before Sept. 11, 2001, and is suffering financial difficulty. Use the graph below to convince the banks to give Comfort Airlines a loan to maintain their fleet.



© Olympia High School (2004)

2

Four OHS students had a hot dog eating contest. Student #1 eats 45 hotdogs per hour, Student #2 eats 4 hot dogs every 5 minutes, Student #3 takes 12 minutes to eat 7 hot dogs, and Student #4 is able to eat 20 hot dogs in 1/2 hour. List the finishing order of the students in the contest.

- #1, #2, #3, #4
- #2, #4, #3, #1
- #3, #4, #2, #1
- #2, #1, #4, #3

© Olympia High School (2004)

3

Damien multiplied $(2x + 3)(2x^2 - 5x + 8)$ as follows:

		2	-5	+8
2	4	-10	+16	
3	6	-15	+24	

$4x^3$ $4x^2$ $31x$ 24

Is this the correct answer? Explain his method.

© Olympia High School (2004)

4

The owners of a toy shop need to decide on an internet access plan for credit card transactions. The dial-up plan costs \$19.99 per month for unlimited access. The prepaid plan is sold in \$20 increments. It provides 20 hours of internet access for \$20. In an average day the store has 225 transactions, 80% of which are credit card transactions. The store is open 363 days per year. With either access plan, the average online time for a credit card transaction online is 12 seconds. Which plan is better for this business? Explain your reasoning.

© Olympia High School (2004)

5

A $3 \times 4 \times 5$ inch block of wood is painted and then cut into one inch cubes. The cubes are placed into a bag. What is the probability that a randomly chosen cube will have exactly one painted face?

- | | |
|---|---|
| <p>a. $\frac{9}{10}$</p> <p>c. $\frac{4}{15}$</p> | <p>b. $\frac{23}{30}$</p> <p>d. $\frac{11}{30}$</p> |
|---|---|

© Olympia High School (2004)

6