SUNSHINE MATH - 8
Pluto, VI

Name: _____

(This shows my own thinking.)

★★★★ 1. On a digital clock showing hours and minutes, how many different readings between 11:00 a.m. and 5:00 p.m. contain at least two 2's?

Answer: _____

★ 2. A clever woman sat beneath a grape vine watching her husband pick grapes. She noticed that the number of grapes in his basket doubled every minute, and that it was precisely filled at 1:00 p.m. At what time was his basket half full?

Answer: _____

★★★ 3. Bev, Debbie and Jen are friends. Debbie, who always tells the truth, says the youngest woman is her cousin. Bev, who always lies, says she is older than Debbie but younger than Jen. The ages of the women are 40, 36, and 23. Give each woman's age.

Answer: Bev _____ Debbie _____ Jen _____

★★★★ 4. The faces on a regular decahedral die -- one with ten faces instead of six -- are numbered one through ten. What is the probability of rolling three 8's in succession?

Answer: _____

★★★ 5. If $a \diamond b = \frac{1}{b} - \frac{1}{a}$, express $8 \diamond 3$ as a common fraction.

Answer: _____

★★ 6. Farmer Benson has a rectangular pig pen. The lengths of the pen's sides are 26 m by 18 m. If the length of each side of the pig pen is tripled, what will happen to the area of the pig pen? Circle the best answer below.

a. The area will also triple. b. The area will be 9 times as much as before.

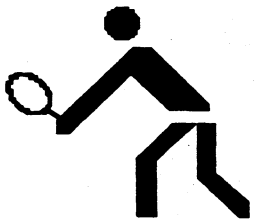
c. The area won't change. d. The area will double.

★ 7. Stamps are $0.32. Janice has $7.00. How many stamps can she buy?

Answer: _____ stamps

★★ 8. For every 5 serves Gabrielle makes, Tammy makes 3. At practice one day, Tammy made 75 serves. How many serves did Gabrielle make?

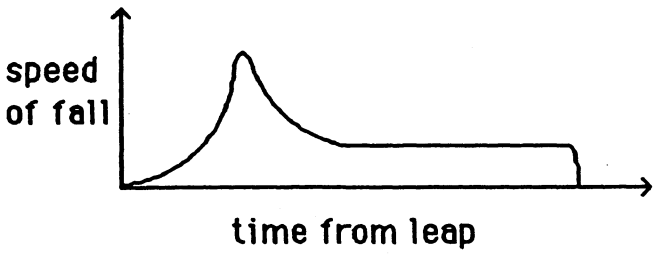
Answer: _____ serves



★★★★ 9. Ginger watched the man from the carnival ride a very tall bicycle. She wondered about riding it from Mudville to Peoria, a distance of 266 miles. The diameter of the wheels was 83 inches. The pedals were geared so that one complete turn caused the wheel to rotate 8.4 times. If Ginger turns the pedals once every 5 seconds, and can maintain that rate, about how long would it take to make the trip?

Answer: _____ hours

★★★ 10. The story of a skydiver has been jumbled up. Place each letter on a correct position on the horizontal axis of the graph, to show when that event was occuring.



A. She opened the parachute.
B. She hit the ground.
C. She leaped from the plane.
D. She floated gently down.
E. She was in "free fall" after jumping.