MATH SUPERSTARS – 6

Uranus, XXI

Name: _____

(This shows my own thinking.)

★★★ 1. How much change will you get back from a $5 bill if you order a cheeseburger platter? Sales tax is 5%, and is always rounded up to the next penny if necessary.

Answer_____

Hamburger	$2.00	fries	.89¢
Cheeseburger	$2.15	cola	.99¢
Tuna melt	$2.45	shake	$1.39
Platter (includes sandwich, fries and cola): add $1.45 to sandwich price			

★ 2. Iris looked at the sign above, asked for a cola, and gave the clerk a penny and told him to "keep the change." Why was she justified for doing this, mathematically speaking?
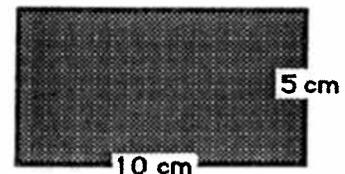
Answer: _____

★★ 3. Josie's hobby is learning everything about the Presidents of the United States. Her friend Jacque loves math. Jacque posed the following situation to Josie: Find the number of letters in the last name of the third President of the United States. Add the total number of letters in the last name of the President elected in 1976. Now find the prime factors of this number. What is the correct answer?

Answer: _____

★★ 4. The softball team won 70% of its games and won 4 more than it lost. How many games did the team lose?
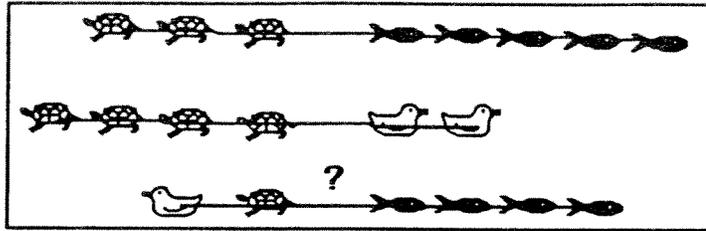
Answer: _____ games

★★ 5. What happens to the *area* of the piece of cardboard to the right if its length and width are both doubled? Circle the best answer.

5 cm

10 cm

a. The area doubles.
b. The area stays the same.
c. The area gets smaller.
d. The area is 4 times as great.

★★　6. Dirk trained his water babies to have tug of war contests. He found that 3 turtles could tug the same as 5 goldfish, and 4 turtles could tug the same as 2 baby ducks. Which team would win between a baby duck and a turtle matched against 4 goldfish? Circle the winners below.

★★★　7. In a gymnastics competition, five judges award scores on a 10-point scale for each event. The high and low scores are discarded before an average score is determined. The judges' scores for Terri's vault at a recent competition were 8.3, 9.0, 8.8, 7.5 and 8.4. What was Terri's score for the vault?

Answer: _____

★★★　8. Hannah kept track of the new baby elephant at the zoo. At one month the baby weighed 2 kg. At 2 months, he weighed 5 kg. At 3 months, he weighed 14 kg, and at 4 months he weighed 41 kg. Hannah noticed a pattern -- what was her prediction for his weight at 7 months?

Answer: _____ kg

★★　9. Andy weighed his dog, then attached two identical helium balloons to his collar and weighed him again. If he attached a third identical balloon to the dog, what would the scale read? Write the correct answer in the scale.