Show all work on a separate piece of paper. Put all answers on the answer sheet provided.

## Spiral Two Review

Due: 7/21/17

1. What are the terms in the expression $6 y-2 x+9$ ?
A. $6 y,-2 x$
B. $6 \mathrm{y},-2 \mathrm{x}, 9$
C. $6 y, 2 x, 9$
D. $6,-2,9$
2. Which expression is equivalent to $\frac{1}{2}(8+24)$ ?
A. $4+12$
B. $4+24$
C. $16+12$
D. $8+12$
3. Which set of values makes the inequality below true?

$$
x+9.2<25.8
$$

A. $\{3.1,12.5,9\}$
B. $\{7.6,8.6,17.3\}$
C. $\{24.5,26.2,30.1\}$
D. $\{17.1,16.8,18.2\}$
4. To ride a roller coaster, a person must be over 4 feet tall. Which inequality represents the correct height requirement, $x$, in feet?
A. $x<4$
B. $x \geq 4$
C. $x \leq 4$
D. $x>4$
5. There are $x$ number of slices of pizza. Jana and her five friends want to split the pizza, so everyone gets the same amount. Which expression represents the number of slices of pizza each person will get?
A. $x \div 5$
B. 5
C. $x \div 6$
D. $6 x$
6.

What is the value of $\left(\frac{1}{3}\right)^{4}$ ?
7. A student designed a logo for a $t$-shirt. The logo is shaped like the polygon below.


What is the area of the polygon, in square centimeters $\left(\mathrm{cm}^{2}\right)$ ?
8. What is the area of the triangle below?


8 mm
9. What is the area of the trapezoid below?

10. The trapezoid below is made up of three isosceles triangles, as shown in the diagram.


What is the total area of trapezoid?
11. Three friends ordered personal-sized pizzas for lunch. Lucia ate $1 / 3$ of her pizza, Allie ate $1 / 4$ of her pizza, and Carolina ate $3 / 8$ of her pizza. Which statement correctly compares the amount of pizza that the friends ate?
A. Carolina ate more pizza than Allie but less than Lucia.
B. Allie ate more pizza than Carolina but less than Lucia.
C. Lucia ate more pizza than Allie but less than Carolina.
D. Carolina ate more pizza than Lucia but less than Allie.
12. Michael had $\$ 128.72$ in his checking account. He had debits of $\$ 12.34$ and $\$ 28.79$. How much money does Michael have left in his checking account? (No calculator. SHOW ALL WORK!)
13. Two sisters purchased a car for $\$ 18,498$. If they each paid half, how much money did they each pay? (No calculator. SHOW ALL WORK!)
14.

What is the area of the figure below?

15. A book costs $\$ 12$ and a board game costs $\$ 28$. What is the ratio of the cost of the book to the cost of the board game?
16. Nancy paid $\$ 3.85$ for a pack of 4 highlighters. At the same rate, how much would 18 highlighters cost?
17. Fifty percent of the students in a class are boys. There are 18 boys in the class. How many total students are in the class?
18. The table below shows the color and number of pens in a classroom.
Pens in a Classroom

| Color | Number |
| :---: | :---: |
| black | 50 |
| blue | 8 |
| green | 4 |
| red | 3 |

What is the ratio of the number of red pens to the total number of pens?
19. A car traveled 420 miles in 8 hours. What is the average rate of the car in miles per hour?
20. What is the value of $16(4-2)^{3}+3 \div(10-7)$ ?

