Solve every problem on the answer sheet provided.

1. Which expression is equal to $24 x-18 y$ ?
A. $6(4 x-3 y)$
B. $6(4 x-18 y)$
C. $12(2 x-2 y)$
D. $24(\mathrm{x}-18 \mathrm{y})$
2. Simplify: $4 x-6 x+12-20-5 x$ ?
3. Which of the following equations is an example of the distributive property?
A. $r(s+t)=r s+r t$
B. $a(b c)=(a b) c$
C. $x+(y+z)=(x+y)+z$
D. $b(c+d)=b(d+c)$
4. Rheanna went to the store with 3 quarters, 1 dime, and 2 nickels in her coin purse and $\$ 5.00$ in her wallet. She purchased 4 cans of green beans for $\$ 0.49$ each. If she paid cash for the items, how much money did she have left? NO CALCULATOR. You must show your calculations to receive credit.
5. In a high school basketball game, Sarah scored 10 points in the first half of the game. In the second half, Sarah scored only 3-point shots. Sarah scored a total of 31 points during the entire game. How many 3-point shots did Sarah make in the second half? You must write an equation and solve to receive credit.
6. Janis paid a total of $\$ 260$ to purchase 20 music CDs. Each CD was the same price. The total cost included a shipping and handling fee of $\$ 20$. What was the price of one $C D$ ? You must write and equation and solve to receive credit.
7. What is the length of a rectangular rose garden with a width of 35 feet and a perimeter of 190 feet? You must write an equation and solve to receive credit.
8. Caitlyn is saving for vacation. She already has $\$ 38$ and plans to save $\$ 18$ per week until she reaches her goal of $\$ 524$. Caitlyn's total savings, $s$, can be determined using this equation, where $w$ represents the number of weeks she saves.
$s=18 w+38$
How many weeks will Caitlyn need to save to reach her goal of $\$ 524$ ?
9. Gavin starts with $x$ marbles. If Gavin gives 3 of his marbles to Cindy, then Cindy will have twice as many marbles as Gavin has after the exchange. If $y$ is the number of marbles that Cindy has after the exchange, which of the following equations is true?
A. $y=2(x-3)$
B. $y=2(x-1)$
C. $y=2(x+1)$
D. $y=2(x+3)$
10. The drama club sold tickets to a play for $\$ 5$ each. They also made $\$ 55$ in soda and popcorn sales. If the drama club made a total of $\$ 290$, how many tickets were sold? You must write an equation and solve to receive credit.
11. The formula for the perimeter of a rectangle is $P=2 L+2 W$. The perimeter of the rectangle below is 20 yd. What is the width?

12. The cost for a taxi ride is $\$ 3.00$, plus $\$ 0.60$ for each mile traveled. Ms. Jackson was charged $\$ 15.60$ for a taxi ride. How many miles was Ms. Jackson's taxi ride? You must write an equation and solve to receive credit.
13. What is the value of $x$ in the equation $24-2 x=16$ ?
14. To solve the inequality $5-7 x \geq 0$, Xiomara found that $x \geq-\frac{5}{7}$ and Andrew found that $x \leq \frac{5}{7}$. Which one had the correct answer and why?
A. Xiomara, because $7 x \geq-5$, so $x \geq-\frac{5}{7}$
C. Andrew, because $-7 x \geq-5$, so $x \leq \frac{5}{7}$
B. Xiomara, because $-7 x \geq 5$, so $x \geq-\frac{5}{7}$
D. Andrew, because $7 x \geq 5$, so $x \leq \frac{5}{7}$
15. Alyssa's age is twice Nora's age plus five years. If Alyssa is 27 years old, how old is Nora? You must write an equation and solve to receive credit.
16. Sally plans to run 12 miles. She ran $5 \frac{1}{8}$ miles and then stopped for a water break. How many miles does Sally have left to run? NO CALCULATOR. ${ }^{8}$ You must show your calculations to receive credit.
A. 6.125 miles
B. 6.875 miles
C. 7.125 miles
D. 7.875 miles
17. Using a loyalty card at the local gas station store, Ella gets a free soda after buying 5 sodas at the regular price of $89 \phi$. Same-sized sodas at the local fast food restaurant are $79 \phi$ each. How do the two deals compare if Ella buys 6 sodas? NO CALCULATOR. You must show your calculations to receive credit.
A. Ella saves $50 \notin$ by purchasing her sodas at the fast food restaurant.
B. Ella saves $60 \notin$ by purchasing her sodas at the fast food restaurant.
C. Ella saves $29 \propto$ by purchasing her sodas at the gas station using the loyalty card.
D. Ella saves $31 \notin$ by purchasing her sodas at the gas station using the loyalty card.
18. What is $\frac{2}{3}-\frac{6}{16}$ written in simplest terms? NO CALCULATOR. You must show your calculations to receive credit.
19. A survey of 120 families found that one-fourth of the families owned only 1 vehicle and that one-third owned 2 vehicles. Of those surveyed, how many families owned only 1 vehicle? How many owned 2 vehicles? NO CALCULATOR. You must show you calculations to receive credit.
20. What is $\frac{11}{16}+\frac{4}{10}-\frac{3}{4} ?$ NO CALCULATOR. You must show your calculations to receive credit.
