1. Suppose a dog can run 65 feet in 8 seconds. A cat can run 45 feet in 5 seconds. Which animal can run faster? How much faster?
2. Brandon purchased two cheeseburgers for $\$ 4.15$ each and three milkshakes for $\$ 3.85$ each. If sales tax is $8.25 \%$, what is the total of Brandon's purchase? Round to the nearest hundredth.
3. Below is the weight of the five football players from each team. How much higher is the median weight of the Panthers compared to the Steelers?

| Panthers |  | Steelers |  |
| :---: | :---: | :---: | :---: |
| Cam Newton | 235 | Ben <br> Roethlisberger | 221 |
| Greg Olsen | 273 | DeAngelo <br> Williams | 203 |
| Mike Tolbert | 264 | Antonio Brown | 171 |
| Michael <br> Oher | 305 | Le'Veon Bell | 220 |
| Thomas <br> Davis | 245 | Ryan Shazier | 225 |

4. Solve the inequality. $9 \leq-3 x+18$
5. Kabir is laying tile on his rectangular kitchen floor. The dimensions of the floor are $16 \frac{1}{2}$ feet by 13 feet. If he is using square tiles with a side length of $\frac{1}{4}$ foot, how many tiles will he need to cover the floor?
6. What is the surface area of this figure?

7. What is the difference between the students' Mean Absolute Deviation?

| Student | Test <br> $\mathbf{1}$ | Test <br> $\mathbf{2}$ | Test <br> $\mathbf{3}$ | Test <br> $\mathbf{4}$ |
| :--- | :---: | :---: | :--- | :--- |
| Caleb | 75 | 80 | 94 | 97 |
| Isaiah | 83 | 85 | 81 | 92 |

8. Elizabeth's bathroom is 10 feet by 8 feet. She is laying square tiles with a side length of 2 inches. How many tiles does she need?
9. Solve for $\mathrm{x} . \quad-3=3+\frac{x}{9}$
10. Chris has 36 t -shirts. Two fourths of the t -shirts are red, two-sixths of the $t$-shirts are blue; the remainder of the $t$-shirts are gray. How many gray $t$-shirts does he own?
11. Anthony needs a new suit. He has a $15 \%$ off coupon that will be applied before a tax of $8.25 \%$ is applied to his total. How much will he end up paying for a $\$ 245$ suit? Round to the nearest hundredth.
12. Angles $X$ and $Y$ are complementary. Angle $X$ measures $2 x-9$. Angle $Y$ measures 31 degrees. What is the value of x ?
13. Emily is ordering a pizza online. She will randomly select one crust type, sauce, and topping. What is the probability she will select Hand Tossed crust, red sauce, and mushrooms?

| Crust Type | Sauce | Toppings |
| :---: | :---: | :---: |
| Thin | Red Sauce | Cheese |
| Hand- <br> Tossed | White Sauce | Pepperoni |
| Pan | No Sauce | Mushrooms |
|  |  | Spinach |
|  |  | Sausage |

14. Based on the table, write an equation to represent the dollars earned, $d$, for any amount of hours worked, $h$.

| Hours | Dollars <br> Earned |
| :--- | :--- |
| 2 | 6.5 |
| 4 | 13 |
| 5 | 16.25 |
| 8 | 26 |

15. Stephanie saved $\$ 35$ every week for 9 weeks. Then she spent $55 \%$ of the money for a new bike. How much money did she have left?
16. David made a scale drawing of his basketball goal. The basketball goal is 12 feet tall. In the drawing the basketball goal is 3 inches. What is the scale of the drawing?
17. Diamond is playing Yahtzee with her family. She is using five dice, numbered 1-6. What is the probability she will roll all odd numbers?
18. Simplify the expression $-4(6 x-3 y)+5(7 y+x)$
19. Cameron took his girlfriend out to dinner for her birthday. Dinner was $\$ 73.98$. Tax on the meal was $8.25 \%$ of the price of the meal. They left a tip that was $18 \%$ of the meal and tax. What is the total cost of the meal?
20. Solve for x . $\quad-6 x-9>15$
