Grade 6 Sample Items

1. **Which ordered pair is a solution of y = x + 4?**

    A. (0, 0)
    B. (5, 54)
    C. (7, 28)
    D. (9, 13)

2. **Which of the following is equivalent to $\frac{4}{5}$?**

    A. 40%
    B. 0.8
    C. 0.4
    D. 8%

3. **Tony ate dinner at a restaurant. His meal cost $14.65, including tax. How much TOTAL will Tony pay for his dinner if he leaves an 18% tip?**

    A. $2.64
    B. $14.83
    C. $17.29
    D. $32.65

4. **The data below shows David's test scores in history class.**

    65, 85, 85, 85, 90, 90, 95, 95, 100, 100

    David's teacher allows him to use the mean, median, or mode of his test scores to represent his final grade. Which of the following gives David the highest final grade?

    A. mean
    B. median
    C. mode
    D. mean and mode are the same

5. **Which of the following is equivalent to $|-5|$?**
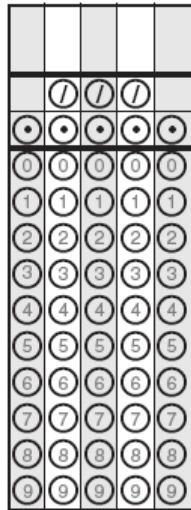
    A. -10
    B. -5
    C. 0
    D. 5

6. Cindy's dinner cost $12.50, before tax. Cindy must pay 6% tax on her meal. She will also give a 20% tip on the cost of her dinner before tax. How much will Cindy pay, in total, for dinner, tax, and tip?
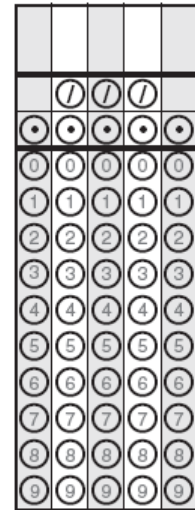
A. $15.10
B. $15.63
C. $15.75
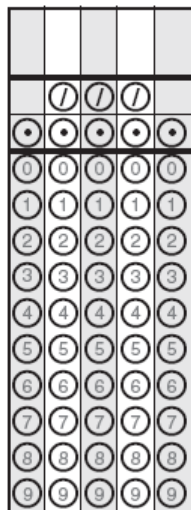D. $38.00

7. Evaluate:

$$\frac{8+6\times3}{104\div2}$$

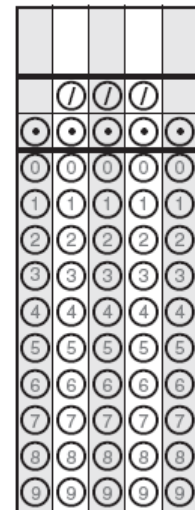8. If two angles in a triangle measure 34° and 92°, what is the measure, in degrees, of the third angle?

9. What is the solution in the proportion below?

$$\frac{6}{5}=\frac{n}{55}$$

10. What is the area, in square feet, of a circle with a diameter of 8 feet? Use 3.14 for pi.

11. Sue bought 4 rings for her mom. Each ring cost the same amount of money. The total cost was $31.

What is the cost, in dollars, for 1 ring?

Show All Work

Answer $_____

Write an inequality that can be used to determine the maximum number of rings (r) Sue can buy with $200.

Inequality_____

Sue claims that she can buy 2 rings for each of her 13 friends with $200. Is Sue's claim correct?   Use words, numbers, and/or symbols to support your answer.

Show All Work

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_____

12. Jeff has to determine the cost of border material to install along the perimeter of his rectangular garden. Jeff's garden measures 10 feet by 7 feet. The material costs $0.42 per foot not including tax.

Jeff states that $15 will be enough money to cover the cost of material including 6% sales tax. Determine if Jeff's statement is correct. Justify your answer using words, numbers, and/or symbols.

Show All Work

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13. It takes 1 ticket to ride the Ferris wheel at an amusement park. The amusement park earns $144 for each Ferris wheel ride if the cars are full. The Ferris wheel seats 48 people.

Write an equation that can be used to determine the cost (c) for 1 ticket.

Equation_____

The roller coaster ride seats a total of 16 people. It takes 2 tickets per person to ride the roller coaster. One ticket for the roller coaster costs the same amount as one ticket for the Ferris wheel.

If a full Ferris wheel is run 10 times a day, how many full roller coaster rides need to run each day to earn the same amount of money as the Ferris wheel?

Show All Work

Answer_____**full roller coaster rides**

14. A sixth grade class is going on a field trip to see a play.

    For the 27 students to go on the field trip, the van rentals will cost $545, gas will cost $130, and admission to the play will cost $945.

    Each student has been paying $4 every week to pay for the trip. The class has already collected $864 for the trip.

    How many MORE weeks does each student have to pay $4 per week to have enough money to pay for the entire trip?

    Show All Work

    Answer_____weeks

    The students will also have to pay for the cost of their lunch. The play will provide lunch at a cost of $7.25 per student.

    What is the total amount of money each student will pay for the cost of the field trip, including lunch?

    Show All Work

    Answer $_____

15. Scott is saving money to buy a football ticket that costs $48.

Scott receives $5 every week for doing chores at home. Scott spends $1.50 every week and saves the rest.

How many weeks will it take Scott to have enough money to purchase the football ticket?

Show All Work

Answer_____**weeks**

Scott can earn extra money by doing chores for his neighbor. His neighbor will pay him $1.50 for each chore that takes him 45 minutes or less.

What is the maximum amount of time, in HOURS, that Scott would have to spend doing chores for his neighbor to be able to buy a second ticket for his brother?

Show All Work

Answer_____**hours**