

Fourth Grade Solutions

1. B. $\frac{6 \times 4}{2} = 12$

2. B. Taking the difference, the result is $50.00 - 13.37 = 36.63$

3. C. Adding up all the numbers and dividing by 7 gives $\frac{8 + 11 + 14 + 7 + 9 + 10 + 11}{7} = 10$

4. A. The range is the different between the least and greatest, $14 - 7 = 7$. The mode is the number occurring the most in the set, which is 11. $11 - 7 = 4$

5. C. When ordered from least to greatest, the median is the middle number. The median in this data set is 10. $10 - 4 = 6$. The name of a polygon with 6 sides is a hexagon.

6. C. In this sequence, each term is the 12 subtracted from the last term. $33 - 12 = 21$

7. C. $(13)(.25) + (24)(.10) + (7)(.05) + (3)(.01) = 6.03$

8. B. Since an adult takes 180 breaths in 15 minutes, he/she takes 720 breaths in 1 hour (60 minutes). Since a baby takes 300 breaths in 15 minutes, he/she takes 1200 breaths in 1 hour. $1200 - 720 = 480$.

9. A. Each side of the square is 4.5 inches long, so the perimeter of the square is 18 inches. A regular hexagon has 6 sides of equal length, and since the perimeter is also 18 inches, each side must be 3 inches.

10. A. Since 4 people are wearing socks, and 3 people are wearing both socks and shoes, 1 person is wearing ONLY socks. Since 6 people are wearing shoes, and 3 people are wearing both socks and shoes, 3 people are wearing ONLY shoes. So, we have 3 wearing socks and shoes, 1 wearing ONLY socks, and 3 wearing ONLY shoes. $1 + 3 + 3 = 7$. Since there are 12 people at the party, $12 - 7 = 5$ people wearing neither.

11. A. If the quotient of two numbers is equal to 0, the numerator must be equal to 0. 0 times any other number = 0.

12. D. The perimeter of a rectangle is $2(\text{length}) + 2(\text{width})$. $2(3.5) + 2(4) = 15$

13. B. Statement I is false. 9 is not a prime number, because one of its factors is 3.

Statement II is true. $(.15)(200) = 30$

Statement III is false. Since 1 yard equals 3 feet, 9 yards equals 27 feet.

Therefore, 1 statement is true.

14. B. The number of sides of a decagon is 10, so $A=10$.

The number of faces of a cube is 6, so $B=6$.

The greatest common factor of 6 and 21 is 3, so $C=3$.

$$10+6-(2 \times 3)=16-6=10$$

15. C. Since 10 pennies are equal to one dime, 100 pennies are equal to 10 dimes.

$$16. B. 4.312431-3.755976=0.556455$$

17. A. 90% of 50 is 45. The question asks for how many serves Patrick does NOT hit in, so $50-45=5$.

18. A. $\frac{1 \text{ lap}}{20 \text{ Seconds}} \times 4 = \frac{4 \text{ laps}}{20 \text{ Seconds}}$, so he can swim 4 laps in 20 seconds with his flippers.

19. C. An obtuse triangle is one in which any of the interior angles exceed 90 degrees.

20. B. $\frac{416}{7} = 59r3$, so there are 3 left over.

21. A. Converting both heights to inches, we get Lebron to be $(12)(6)+8=80$ inches, and Coleman to be $(12)(3)+10=46$ inches. $80-46=34$ inches. This is equivalent to 2 feet 10 inches.

22. B. To find out if a number is divisible by seven, take the last digit, double it, and subtract it from the rest of the number. Going through all of these choices, 1036 is divisible by 7, because $103-(6)(2)=91$, which we know is divisible by 7. The other method would be to use long division, and see which choice leaves no remainder.

$$23. A. 216 \div 6 \div 4 \div 3 = 3$$

24. D. Since the cloud creates 500,000 raindrops, and it rains at a rate of 1000 drops per minute, it will stop raining 500 minutes after 9:00. 500 minutes is equivalent to 8 hours and 20 minutes, so it will stop raining at 5:20 pm.

25. D. A birdie is one less than a par. So, subtracting 1 from each value and then adding them all together gives you 27.

$$26. D. 10+9+8 \dots +1=55$$

27. C. The farmer has 36 pumpkins, and can only hold 8, so it will take him 5 trips to get all the pumpkins there. Each trip there and back takes $45+45=90$ minutes, or 1.5 hours. $(1.5)(5)=7.5$ hours.

$$28. A. (5 + 5) \div 5 + 3 - 4 \times 2 = 10 \div 5 + 3 - 8 = 2 - 5 = -3$$

29. C. The circumference of a circle is equal to pi times the diameter. Here, the radius is 7, so the diameter is 14. $(14) \times \left(\frac{22}{7}\right) = 44cm$

30. A. Integers are all of the natural numbers, their negative counterparts, and 0. They are numbers without any fractions or decimals. 0 is the only number from the choices that meets these requirements.