

ELEMENTARY- MUSIC CAPITALS ANSWERS AND SOLUTIONS

**ANSWERS:**

1. D
2. C
3. C
4. D
5. D
6. C
7. D
8. B
9. B
10. D
11. E (4)
12. A
13. C
14. D
15. A
16. A
17. A
18. B
19. D
20. B
21. A
22. C
23. A
24. C
25. B
26. B
27. B
28. A
29. A
30. D

**Solutions:**

- D 1.** By definition of the Commutative Property of Multiplication, the two expressions in the question are equal.
- C 2.** The common difference between each term in the sequence is 6, adding 6 to 20 gives you the answer of 26.
- C 3.** Since one of the options has been eliminated, that gives them with only 2 options to choose from now, so the probability they choose the right turn is  $\frac{1}{2}$ .
- D 4.** The sum of the Latin CDs and Rap CDs is 250, meaning that he has 500 EDM machines. Multiply that number by 2 to get 1000 for the number of classical CDs.
- D 5.** 90 minutes is 1 hour and 30 minutes. If Vera starts getting ready at 5:00 PM, she will be done at 6:30. 75 minutes is 1 hour and 15 minutes. Since she starts at 5:30 PM, she will be done getting ready at 6:45.
- C 6.**  $87 + 18 = 105$     $105 \div 3 = 35$     $x = 35$
- D 7.** 1000 multiplied by 1000 is 1000000
- B 8.** Either use long division or change the denominator to 100 to solve that  $\frac{3}{25}$  is equal to 0.12.
- B 9.** To divide two fractions, multiply the dividend by the divisors inverse. By multiplying  $\frac{5}{6}$  and  $\frac{3}{1}$ , you get  $\frac{5}{2}$ . This can also be solved visually.
- D 10.** If you tripled each side you would have  $9 \times 6$  which is  $54 \text{ ft}^2$ .
- E 11.** A prime number is any number that is divisible by 1 and itself. All the prime numbers from 1 to 10 are: 2, 3, 5, and 7. 4 is not an answer choice so **E** is the correct answer.
- A 12.** There are 24 total letters with 9 vowels and 15 consonants. That gives you a ratio of 9:15 which can be simplified to 3:5.
- C 13.** To solve, multiply the number of shirts she has to the number of pants. 7 times 8 is 56.
- D 14.** 12 times 5 is 60.
- A 15.** If they travel 24 miles every half-hour. That means they are driving at the rate of 48 mph. 480 divided by 48 is 10. It will take 10 hours.
- A 16.** The greatest amount of money she can spend is  $15+8=23$ , since she has \$23 in total. That means she will have \$0 left over.
- A 17.**  $12 \times 5 - 8 \times 5 \div 2 = 60 - 20 = 40$ . Since f is less than 40, the greatest number of frogs she could've seen is 39.

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**B** 18.  $2019 - 1967 = 52$

**D** 19. There are 55 cans in total since there are 11 with her name on it and 44 with other names. If she wants to grab one that doesn't have her name on it, it will be a  $44/55$  or  **$4/5$**  chance she does.

**B**. 20. Dividing both the numerator and denominator by give 7 and  $24/48 = 12/24 = 6/12 = 1/2 \Rightarrow 7 \frac{1}{2}$

**A** 21. Distributing the 10 to both terms in the parentheses gives  $5x = 30 - 10x$ . Adding  $10x$  to both sides brings you to  $15x = 30$ . To find  $x$ , divide both sides by 15 which leaves you with  $x=2$ .

**C** 22. If she rolls a 5 or a 6, that means she will choose "Hey Jude". That leaves her to roll a 1, 2, 3 or 4 to play "Help!". Meaning that the probability for her to choose that song is  $4/6$  or  **$2/3$** .

**A** 23. Since they both take 1 hour to fix the car, they will be working twice as fast as they would usually be if they were working alone. This means that it will take  $1/2$  hours for the car to be fixed.

**C** 24. There are 7 different letters and 11 letters in total in "Chattanooga".

**B** 25. 14 times 3 is 42. That divided by 2 is 21.

**B** 26.  $24/18$  simplified is  $4/3$ .  $4+3=7$  meaning they spend a total of \$14 on special tour tickets. They also spend \$20 in total for the admission tickets, therefore they spend \$34 in total.

**B** 27. 4 is lowest integer that can be multiplied by 12 and be greater than 44.

**A** 28. Change feet to inches to get the measurements of 24 by 36 inches for Vera's banner. That means the two areas are 864 inches and 420 inches. Therefore, Vera's banner is larger with an area of 6 feet.

**A** 29. Since their room key scanner is broken, that means that when they scan their room keys, there a  $1/2$  chance that the door will not open. To find the probability of them not getting into the room after they tried scanning twice, multiple  $1/2$  by  $1/2$  to get  $1/4$  as your answer.

**D** 30. 30 multiplied by 3 is 90. 90 times 2 is 180 and 60 subtracted from that gives 120. 120 plus 90 leaves you with a total of 210 pictures.