Common Core Math 7 EOG Questions- The Number System

|  |  |
| --- | --- |
| 1. Which situation below describes the number line shown?     1. The temperature outside rose 5 degrees and dropped 2 degrees 2. Harper earned $7 helping his dad, then spent $5 on lunch. 3. Lara spent $7 on a new shirt, then spent $5 dollars on a new hat. 4. Katie walked 7 blocks to her friend’s house, then walked 2 blocks back. | 2. Which statement is true of points X and Y on the number line?     1. X + Y < 0 2. XY > -3 3. X – Y > 0 4. Y ÷ X > 0 |
| 3. Which math sentence could be used to show the combined value of the tokens?     1. 11 + (-10) = 1 2. 11 + (-10) = 21 3. 11 – (-10) = 1 4. 11 – (-10) = 21 | 4. Which math sentence could be used to show the combined value of the tokens?     1. -6 + 9 = -3 2. -6 + 9 = 3 3. -6 – 9 = -15 4. -6 – 9 = 15 |
| 5. The daily high temperatures in Anchorage, Alaska last week are listed in the chart below:   |  |  | | --- | --- | | Day | Temperature | | Monday | 15℉ | | Tuesday | 8℉ | | Wednesday | -6℉ | | Thursday | -8℉ | | Friday | -19℉ |   What was the average daily low temperature in Anchorage for those days?   1. -10℉ 2. -5℉ 3. -2℉ 4. 2℉ | 6. Mikayla and her two friends made a pizza and cut it into 8 equal-sized slices. If Mikayla and her friends ate 5 slices of pizza, what decimal represents the portion of pizza that remains?   1. .5 2. .375 3. .35 4. .625 |
| 7. Harold made a pie for after dinner. If he ate ½ of the pie and his wife Sara ate ¼ of the pie, which picture could represent the amount of pie left? The shaded region of each circle shows how much pie was left over. | 8. Harold made a pie for after dinner. If he ate ¼ of the pie and his wife Sara ate of what is left, which picture could represent the amount of pie left? The shaded region of each circle shows how much pie was left over. |
| 9. Which mixed number is equivalent to 5.292 | 10. Which expression has the greatest value?   1. -9 – 8 2. -9 + 8 3. 8 – 9 4. 8 – (-9) |
| 11. Navya has 10½ feet of craft wire that she uses to make earrings. If each pair of earring requires ¾ foot of wire, how many pairs of earrings is Navya able to make?   1. 1 2. 9 3. 10 4. 14 | 12. While visiting Chicago, Jenny used a taxi for transportation. The taxis charged her $.95 per city block. If the taxis charged her a total of $25.65 for transportation, how many total city blocks did she travel?   1. 24.7 blocks 2. 25 blocks 3. 26 blocks 4. 27 blocks |
| 13. Sasha agreed to make 4½ dozen cupcakes for her friend’s big birthday bash. So far, she has baked and decorated of the cupcakes. If there are 12 cupcakes in a dozen, how many cupcakes are ready for the party?   1. 1.5 cupcakes 2. 4 cupcakes 3. 18 cupcakes 4. 36 cupcakes | 14. The distance from Jessie’s house to the neighborhood dog park is 1¼ miles. If Jessie and her dog ran of the way there, how far did they run?   1. mile 2. ½ mile 3. mile 4. 1 mile |
| 15. Which expression has a value of -19?   1. (8 – 9) – 18 2. 8 – (-9) 3. -9 – 8 4. -1 – (-17) | 16. Laura’s gym membership fee of $45 is automatically deducted from her bank account each month. If she must also pay a one-time yearly maintenance fee of $75, which integer would represent the total deductions for one year of gym membership?   1. - $120 2. - $465 3. - $540 4. - $615 |
| 17. Tanya entered a hotel elevator on the 7th floor. She rode down 2 floors, up 5 floors, down 6 floors, up 7 floors and down 2 floors. On what floor did Tanya get off the elevator?   1. 6th floor 2. 7th floor 3. 9th floor 4. 11th floor | 18. Find the product of the following expression:     1. 624 2. 620 3. 62.4 4. 64 |
| 19. Which is equivalent to the expression  (45 – 67) – 98   1. -120 2. -76 3. 14 4. 210 | 20. At the beginning of the week, the temperature was 14℉. During the week, it decreased by 25℉. What was the temperate by the end of the week?   1. 39℉ 2. 11℉ 3. -11℉ 4. -39℉ |