## 国 Practice4Me

# NUMERICAL REASONING TEST 

Free Practice Test
15 Sample Questions with Detailed Answers

## Numerical Reasoning Sample Test

Take this numerical aptitude test to see where you are at in your preparations. You can find more sample questions and info on our Numerical Reasoning Test study guide.

1. Jaimie found a bank that offers $3 \%$ interest annually for savings accounts. Jaimie's sister Angie finds a different bank account that offers 3.75\% interest annually. If they both invest $\$ 500$ today and neither of them touch the bank accounts for ten years, how much more money will Angie have at the end of the ten years?
A) $\$ 34.78$
B) $\$ 722.52$
C) $\$ 671.96$
D) $\$ 50.56$
2. Fleur's beauty products are now offering $35 \%$ more shampoo in every bottle. If they now have 260z., how much did they have originally?
A) 25.65 oz .
B) 16.9 oz .
C) 9.1 oz .
D) 19.26 oz .
3. Mrs. Claire's 10th grade biology class of 18 students received an average of $85 \%$ on their exam collectively. However, Brian, who received 100\%, got a much higher score than the rest of his classmates. If Mrs. Claire removes Brian's score from the group, what is the new average?
A) 84.1
B) 81.2
C) 78.6
D) 82.3
4. What is the missing number in this series?
$2,5,5,15,8,45, X$
A) 45
B) 11
C) 135
D) 9
5. If today one U.S. dollar is equal to 0.88 euros, how many euros can you buy for 200 USD?
A) 188 EUR
B) 200.88 EUR
C) 227.27 EUR
D) 176 EUR
6. $(3+9 * 8-4 \wedge 2)-(16+7-9)$
A) 45
B) 62
C) 66
D) 170
7. Use the following chart to answer the question.

| 緤 | $\stackrel{\text { USD }}{\stackrel{\text { Usix }}{\prime}}$ | EUR | 41 GBP |  | AUD |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | 1.00000 | 0.89130 | 0.76691 | 69.2187 | 1.40683 |
|  | 1.12195 | 1.00000 | 0.86044 | 77.6601 | 1.57839 |
| $\frac{4 v}{6 V}$ | 1.30393 | 1.16220 | 1.00000 | 90.2566 | 1.83441 |
|  | 0.01445 | 0.01288 | 0.01108 | 1.00000 | 0.02032 |
|  | 0.71082 | 0.63356 | 0.54513 | 49.2020 | 1.00000 |

According to the exchange rates displayed in the table, how many euros would I receive for 85 Australian dollars?
A) 53.85
B) 119.58
C) 60.42
D) 134.16
8. A boat rental company has the following pricing scheme: they charge a flat fee plus $\$ 0.50$ for every additional hour after the first hour. If Alma and Aaron spent a total of $\$ 8.50$ for seven and a half hours, what is the flat fee?
A) $\$ 4.50$
B) $\$ 5$
C) $\$ 7$
D) $\$ 7.50$
9. Andrew rides his bike to school every day. If he rides at 16 mph , he can arrive in $1 / 4$ hours. How long will it take Andrew to get to school if he rides at an average of 20 mph ?
A) 8 minutes
B) 20 minutes
C) 48 minutes
D) 12 minutes
10. In a bag, there are 5 red marbles, 4 blue marbles, and 1 yellow marble. What is the probability that Winifred will choose a red marble then a blue marble then a yellow marble?
A) $2.78 \%$
B) $1.07 \%$
C) $106.9 \%$
D) $4.44 \%$
11. $(7 / 12+3 / 4+2 / 3) /(2 / 3)$
A) $18 / 19$
B) $24 / 57$
C) $4 / 3$
D) 3
12. Choose the number that completes the series.
$1,3,7, X, 21,31,43,57$
A) 15
B) 13
C) 14
D) 11
13. If the ratio of flour to water in a bread recipe is $5: 2$, how much water would you have to add to 17.5 cups of flour?
A) 7
B) 8
C) 6.5
D) 10

Use the table below to answer questions 14 and 15

| Rank | Country | 2019 Population $\boldsymbol{7}$ | 2018 Population |
| :--- | :--- | :--- | :--- |
| 1 | China | $1,420,062,022$ | $1,415,045,928$ |
| 2 | India | $1,368,737,513$ | $1,354,051,854$ |
| 3 | United States | $329,093,110$ | $326,766,748$ |
| 4 | Indonesia | $269,536,482$ | $266,794,980$ |
| 5 | Brazil | $212,392,717$ | $210,867,954$ |
| 6 | Pakistan | $204,596,442$ | $200,813,818$ |
| 7 | Nigeria | $200,962,417$ | $195,875,237$ |
| 8 | Bangladesh | $168,065,920$ | $166,368,149$ |
| 9 | Russia | $143,895,551$ | $143,964,709$ |
| 10 | Mexico | $132,328,035$ | $130,759,074$ |

14. According to the table, what is the average rate of change in total country populations in 2019 among the top most populous countries in the world?
A) $32,328,035$
B) $420,062,022$
C) $5,016,094$
D) $143,081,554$
15. What was the percent increase in population from 2018 to 2019 in Brazil?
A) $0.71 \%$
B) $0.72 \%$
C) $0.73 \%$
D) $0.74 \%$

## Explained Answers:

1. $\$ 50.56$ - Using the formula $I=p r \wedge t$, you can find the compounded interest earned for both accounts. Just make sure that you add a 1 to the rate. Otherwise, you'll end up with just the interest and not the total amount of cash in the account.
2. 19.26 oz. - You would have had to multiply the original amount by 1.35 to arrive at the number 26 . So, to find the original amount, you divide 26 by 1.35.
3. $84.1 \%$ - Use the average formula to determine the sum of all of the students' grades. Then subtract 100 from that amount and find the new average excluding Brian. Make sure not to forget to divide by 17 and not 18.
4. 11 - The series uses two different rules. Each odd term increases by three while each even term increases 3 times.
5. 176 EUR - Multiply 200 USD by 0.88 EUR to find your answer. Alternatively, you could set up a proportion and solve.
6. 45 - Don't forget your order of operations, and make sure to distribute the negative sign.
7. 60.42EUR - Set up a proportion with $1 / 0.71082$ on one side and $85 / \mathrm{X}$ on the other side.
8. $\$ 5$
9. 12 minutes - Use the formula $\mathrm{d}=\mathrm{rt}$ (distance is equal to time multiplied by rate). Just make sure that you're consistent with your units.
10. $2.78 \%$
11. 3-Remember, dividing by a fraction is like multiplying by its reciprocal
12. 13 - The rule for this series is $n=2+((n-1)-(n-2))+(n-1)$
13. 7 - If you keep the proportions consistent, you'll have to add 3.5 X the water as well.
14. 143,081,554 - Subtract the 2019 population in Mexico from the 2019 population in China and then divide by 9 , the difference between their rank.
15. $0.72 \%$ increase - Subtract the 2018 population in Brazil from the 2019 population in Brazil and divide by the 2018 sum.
