There are 17 questions to test your IQ. Do not look at the answers found at the end of this document, that would be cheating. Write each of your answers down, it makes a difference. Good Luck for the IQ Test!

1. Two people were walking in opposite directions. Both of them walked 6 miles forward then took right and walked 8 miles. How far is each from starting positions?
   a) 14 miles and 14 miles  
   b) 10 miles 10 miles  
   c) 6 miles 6 miles

2. A person has certain number of cows and birds. They have 172 eyes and 344 legs. How many cows and birds does he have?

3. A person has 14 red socks and 14 white socks in a drawer. What is the minimum number of socks that he should take to get a correct pair?

4. When a number is multiplied by 13, it becomes greater to 105 by an amount with which it is lesser to 105 by now. What is the number

5. When asked in an exam how much time is left, the teacher answered that the amount of time left is 1/5 of the time already completed. How much time is left?

6. Two people on cycle are traveling at 10 miles/hour in opposite direction. When they are at a distance of 50 miles, a housefly lands on the first cyclist and then flies to the other at a speed of 16 miles/hour. What is the distance covered by fly?

7. My successor's father is my father's son. and I don't have any brothers or sons. Who is my successor?
   a) Nephew  
   b) Niece  
   c) Daughter  
   d) Myself

8. A fast train leaves London for Brighton and at the same time a slow train leaves Brighton for London. The fast train leaves at 80 mph and the slow train travels at 35 mph. When they meet, which is farther from London?

9. A girl, a boy, and a dog start walking down a road. They start at the same time, from the same point, in the same direction. The boy walks at 5 km/h, the girl at 6 km/h. The dog runs from boy to girl and back again with a constant speed of 10 km/h. The dog does not slow down on the turn. How far does the dog travel in 1 hour?

10. A pool has four taps. The first tap takes two days to fill the pool, the second tap three days, the third four days and the last one only 6 hours. How long will it take to fill the pool using all 4 taps at once?
11. This was a burglary in the Silver City jewelry store last Sunday. Three suspects: Robert, Scott, and Tommy were caught and questioned. Each person said, "One of the other two stole it. I did not do it." Later on the police found out that Tommy was lying and there was only one thief. Who was the thief?

12. James visited an island. There were 2 tribes living on this island. The east tribal people always tell a lie. The west tribal people always tell the truth. James saw a guy passing him. He asked the tour guide to ask that guy where he lives. The tour guide asked the guy and came back with the answer: he lives over west. Did the tour guide tell the truth or tell a lie?

13. I have a horse. Do you know what color it is? Allan said, "I guess it is not black". Brian said, "It is either brown, or gray". Charlie said "I know it is brown". I said, "At least one of you is right and at least one of you is wrong." What is the color of my horse if the color is one of the above?

14. A lady and a gentleman are sister and brother. We do not know who is older. Someone asked them: Who is older? The sister said: I am older. The brother said: I am younger. At least one of them was lying. Who is older?

15. A six digit number 312132 has two 1’s, two 2’s and two 3’s. This number has a very interesting attribute: 1 digit exists between two 1’s, 2 digits exist between two 2’s and 3 digits exist between two 3’s. Can we add two more 4s to become an eight digit number and still holding the above attributes plus 4 digits exist between two 4s?

16. Suppose 8 monkeys take 8 minutes to eat 8 bananas. (a) How many minutes would it take 3 monkeys to eat 3 bananas? (b) How many monkeys would it take to eat 48 bananas in 48 minutes?

17. A group of friends went to a hotel for Dinner. After having their dinner the Bill Amount was of Rs 2400. So they decided to distribute it into equal amount for each. In the group two friends forget to bring their purses along with them. So later on it has been decided that Rs 100 has to be paid more by the other friends on calculated amount. So total how many friends were there in the Group?

IQ Test Answers

The answers to IQ test questions asked above are given below.

1. 10 miles each according to Pythagoras Theorem.

2. Each Cow has 2 eyes and 4 legs and each bird has 2 eyes and 2 legs. Lets call each eye as x and each leg as y. Also each bird is n and each cow is m so:

\[ n(2x+2y) + m(2x + 4y) = 172x + 344y \]
\[ 2x(n+m) + 2y(n+2m) = 172x + 344y \]
\[ n(2x+2y) + m(2x + 4y) = 172x + 344y \]
\[ (n+m) = 86 \text{ and } (n+2m) = 172 \]
\[ n = 86 - m \]
\[ 86 - m + 2m = 172 \text{ or } m = 86 \]

This implies \( n = 0 \).

So, the owner has 0 birds and 86 cows.

3. This is a classic probability puzzle and many puzzles are based on this logic. If the person picks up two socks then there is a possibility of them being different in colour. If he picks up three socks then they are guaranteed red or white. So the minimum number of socks required are three.

4. Let the number be \( x \)

\[ 105 - x = y \]
\[ x = 105 - y \]
\[ 13x = 105 + y \]
\[ 14x = 210 \]
\[ x = 15 \]
5. 10 minutes. The total time was one hour and already 50 minutes are over.

6. You can assume that when the fly lands on cyclist 1 they are 50 miles apart. The fly has to travel \( 50 + x \) miles at 16 miles/hour. Here \( x \) is the additional distance at 10 miles/hour. So the problem is now simplified as

\[
y = 50 + x \quad \text{(distance)}
\]

\[
\frac{50 + x}{16} = \frac{x}{10} \quad \text{(time)}
\]

\[
500 + 10x = 16x
\]

\[
x = 250/3 = 83.33
\]

\[
y = 133.33
\]

7. Daughter

8. When they meet they are both at the same distance away from London.

9. 10 km. Because the dog's speed is 10 km/h.

10. First, work out how much of the pool gets filled by each tap in one hour. The first tap takes 48 hours to fill the pool, so in one hour it fills \( 1/48 \) of the pool. The second tap \( 1/72 \). The third tap \( 1/96 \). And the fourth tap fills \( 1/6 \) of the pool in one hour. We need to add all those fractions together:

\[
\frac{1}{48} + \frac{1}{72} + \frac{1}{96} + \frac{1}{6} = \frac{61}{288}
\]

So, in one hour the pool will be \( \frac{61}{288} \) full and it will be completely full in \( \frac{288}{61} \) hours = 4 hours 43 minutes and 17 seconds.

11. Tommy was the thief. He was not telling the truth. He stole it.

12. If the guy was from the west, he should answer the truth: I am from the west. If the guy was from the east, he also should tell a lie: I am from the west. The answer will always be: 'I am from the west'. So we know the tour guide was telling the truth.

13. If the horse is brown, then every one is right. This is not the answer. If the horse is black, then every one is wrong. This is not the answer either. Therefore, the horse is gray. To verify the answer, Allan was right, Brian was right, but Charlie was wrong.

14. Since there is no conflict between what they said, it meant that either they both told a lie or both told the truth. In this case they both told a lie. The answer is the brother is older.

15. The number will be 41312432 or 23421314. Of course these 2 numbers are actually the same, just reverse the direction from one to become another one. The way to solve this is, first all, put down two 4s and reserve 4 spaces between these two 4s. Then you determine the positions for two 3s. Since you can not put both 3s between 4s, one 3 must be outside of two 4s. After that you just need to try a few cases to find out the answer.

16. (a) 8 Minutes because each monkey takes 8 minutes to eat a banana. (b) 8 Monkeys are required to eat 48 bananas in 48 minutes. Each money will eat 6 bananas.

17. There were 8 friends in the group. Each friend was to share Rs 300 to cover the cost of 2400.
<table>
<thead>
<tr>
<th>Brain Teasers</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Left out Field</strong></td>
</tr>
<tr>
<td>LOV</td>
</tr>
<tr>
<td>poFISHnd</td>
</tr>
<tr>
<td>GR 12” AVE</td>
</tr>
<tr>
<td>faredce</td>
</tr>
<tr>
<td>MEREPEAT</td>
</tr>
<tr>
<td>HEA DA CH E</td>
</tr>
<tr>
<td>sand a n a dnas</td>
</tr>
<tr>
<td>nafish nafish</td>
</tr>
<tr>
<td>KING wo ods</td>
</tr>
</tbody>
</table>
The Mayans of Mexico used a method of dots and lines to show a period of time. Each dot represents a unit, and each bar represents 5 units. From the bottom position to the top position, the symbols refer to the number of days, months, and years, respectively. The example below shows 15 years, 11 months, and 8 days.

If today is April 23, 2006, write the exact age of a person born on March 9, 2001, using the Mayan method of calendar time. (Assume there are no leap years.)

If today is April 23, 2006, write the exact age of a person born on March 9, 2001, using the Mayan method of calendar time. (Assume there are no leap years.)
Prime factorization is finding the factors of a number that are all prime numbers.

To find the prime factors of a number, you start by finding two factors. If either factor is not a prime number, find factors for that factor. Continue the process until all your factors are prime.

Find factors and multiples that will correctly complete the prime factorization diamond below. Hint: The same number appears in the boxes at both ends.
Geometry and the Coordinate Plane

It is said that a picture is worth a thousand words. Sometimes, you can make words act like pictures. This shows their meanings visually. For example, perpendicular lines are lines at right angles to each other. So you might write the term like this:

perpendicular

Try your hand at being clever. Think of a fun way to write the following words:

obtuse
acute
equilateral triangle

perimeter
volume
Geometry and the Coordinate Plane

Leon was preparing drawings for a new building. He had to draw four separate views: one from directly in front; one from directly above; one directly from the side; and one at an angle, showing the building in perspective.

Leon has done the first three views. Can you combine them to do the fourth view, showing the completed building?
What is the measure of the exterior angle of the isosceles-shaped tepee?
Geometry and the Coordinate Plane

If the crank is turned clockwise, which way should the hamster run?
Money

The rules of a coin game state that a move is a jump over one or two coins at a time. What is the smallest number of moves it would take to get the following coins in the order P–P–P–N–N–N, with no gaps between coins?

© 2005 Walsh Publishing

76

© 2009 Walsh Publishing

Money

The rules of a coin game state that a move is a jump over one or two coins at a time. What is the smallest number of moves it would take to get the following coins in the order P–P–P–N–N–N, with no gaps between coins?

© 2005 Walsh Publishing

76

© 2009 Walsh Publishing
A counterfeiter was trying to print his own money, and he came up with this version of a dollar bill. However, he has made a few mistakes. Can you find four errors on this fake bill?
Little Red Riding Hood’s grandmother has given her a big jar that she has been using to collect coins. Among the coins are 18 quarters. Her grandmother says that she can have all the coins if $\frac{1}{2}$ of the quarters go into her college savings account, $\frac{1}{3}$ of them go toward a new CD player, and $\frac{1}{9}$ go toward something fun. After happily agreeing to this, Little Red digs through the quarters and finds that one quarter is actually a subway token.

How many quarters should go in each category?
Money

Find the name of the foreign coins below in this backward word find.

<table>
<thead>
<tr>
<th>Location</th>
<th>Monetary Unit</th>
</tr>
</thead>
<tbody>
<tr>
<td>Germany</td>
<td>euro</td>
</tr>
<tr>
<td>Israel</td>
<td>shekel</td>
</tr>
<tr>
<td>Japan</td>
<td>yen</td>
</tr>
<tr>
<td>Mexico</td>
<td>peso</td>
</tr>
<tr>
<td>Nigeria</td>
<td>naira</td>
</tr>
<tr>
<td>Switzerland</td>
<td>franc</td>
</tr>
<tr>
<td>United States</td>
<td>dollar</td>
</tr>
</tbody>
</table>

A   L   J   E   K   S   H   R   O   O   E   P   R   Y   S   I   M   A   U   A   A   R   J   M   Y   N   I   E   O   F   C   A   N   I   D   S

Money

Find the name of the foreign coins below in this backward word find.

<table>
<thead>
<tr>
<th>Location</th>
<th>Monetary Unit</th>
</tr>
</thead>
<tbody>
<tr>
<td>Germany</td>
<td>euro</td>
</tr>
<tr>
<td>Israel</td>
<td>shekel</td>
</tr>
<tr>
<td>Japan</td>
<td>yen</td>
</tr>
<tr>
<td>Mexico</td>
<td>peso</td>
</tr>
<tr>
<td>Nigeria</td>
<td>naira</td>
</tr>
<tr>
<td>Switzerland</td>
<td>franc</td>
</tr>
<tr>
<td>United States</td>
<td>dollar</td>
</tr>
</tbody>
</table>

A   L   J   E   K   S   H   R   O   O   E   P   R   Y   S   I   M   A   U   A   A   R   J   M   Y   N   I   E   O   F   C   A   N   I   D   S
You may have heard the story of how Hannibal crossed the Alps with an army and a number of elephants. To move all his supplies, he must have used carts as well as elephants.

Imagine that some of Hannibal’s carts had three wheels, one in the front and two in the back. For safety, each had a spare wheel, and the wheels were rotated so that all four wheels got the same amount of wear.

If Hannibal’s entire route was 1,000 miles long, how many miles of wear were put on each wheel?
What is the area of the shaded portion of the circle?
Berto’s Buckets manufactures buckets in many different sizes. Berto is trying to describe all the sizes in a certain product line to a customer, but he has forgotten a few. The sizes increase according to a regular pattern.

Help Berto find the sizes of the missing buckets.

<table>
<thead>
<tr>
<th>Size 1</th>
<th>Size 2</th>
<th>Size 3</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 quart</td>
<td>1 gallon</td>
<td>____________</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Size 4</th>
<th>Size 5</th>
<th>Size 6</th>
</tr>
</thead>
<tbody>
<tr>
<td>4 gallons</td>
<td>____________</td>
<td>9 gallons</td>
</tr>
</tbody>
</table>
Complete the proverb by first unscrambling the letters to make words. Then use the letters in the circles to form another new word. This word completes the proverb.

“___  ___  ___  ___ waits for no man.”

RAYE
HNMT0
TYECNUR
ILNINMELEUM
Measurement

What is the perimeter of the net that could be folded to form this box?

6 meters

5 meters

4 meters
Find the decimal word parts hidden in the puzzle below.

<table>
<thead>
<tr>
<th>Meaning</th>
<th>Word Part</th>
<th>Meaning</th>
<th>Word Part</th>
</tr>
</thead>
<tbody>
<tr>
<td>kilo-</td>
<td>1,000</td>
<td>deci-</td>
<td>$\frac{1}{10}$</td>
</tr>
<tr>
<td>hecto-</td>
<td>100</td>
<td>centi-</td>
<td>$\frac{1}{100}$</td>
</tr>
<tr>
<td>deka-</td>
<td>10</td>
<td>milli-</td>
<td>$\frac{1}{1,000}$</td>
</tr>
</tbody>
</table>

D E K A M I J P N I L
P U I I N V S G O C I
M L L O B U O T C E H
S L O I G L T W C D P
I Z D F E C E N T I G
Data Analysis, Statistics, Combinations, and Probability

All the students in a science class also take a math class. Half of the students who play baseball also take a math class. One-quarter of the students in the math class also take a science class. Sixty students play baseball. Forty students take a science class. Nobody who plays baseball takes a science class.

How many students who take a math class neither take a science class nor play baseball?
Data Analysis, Statistics, Combinations, and Probability

In a first-grade class, a teacher places the following cards on a table.

A A A A C C T T T T

He then flips the cards over and mixes them up. He asks a student to pick up cards randomly and turn them over until she can make the word CAT.

What is the probability of the student making the word CAT on her first try without replacing any cards?

Data Analysis, Statistics, Combinations, and Probability

In a first-grade class, a teacher places the following cards on a table.

A A A A C C T T T T

He then flips the cards over and mixes them up. He asks a student to pick up cards randomly and turn them over until she can make the word CAT.

What is the probability of the student making the word CAT on her first try without replacing any cards?
Data Analysis, Statistics, Combinations, and Probability

In genetics, some traits are dominant, and some are recessive. A dominant gene is shown with a capital letter. A recessive gene is shown with a small letter. If someone inherits both a dominant gene and a recessive gene for the same trait, the dominant gene will appear. The recessive gene only appears if the person inherits two recessive genes for the trait.

A woman with brown eyes (Bb) marries a man with blue eyes (bb). They decide to have children. The square shows the possible combinations of genes for eye color their children could receive.

If the woman and her husband have 3 children, what are the chances that all 3 children will have blue eyes?
Complete the following calculations. Then use the letters of each answer to finish the riddle.

\[
\frac{2}{3} \text{ of } \frac{3}{2} = \_\_\_\_ (i) \quad 40\% \text{ of } 25 = \_\_\_\_ (s)
\]

\[
15\% \times 20 = \_\_\_\_ (n) \quad \frac{3}{4} \text{ of } 12 = \_\_\_\_ (d)
\]

\[
0.20 \times 40 = \_\_\_\_ (v) \quad 50\% \text{ of } 22 = \_\_\_\_ (o)
\]

What did the decimal say to the fraction?

“I see your ___ ___ ___ ___ ___ ___ ___ ___.”

9 1 8 1 10 1 11 3
The diameter of a smaller wheel on a bicycle is \( \frac{7}{22} \) that of the larger wheel. How many times larger is the circumference of the larger wheel than that of the smaller wheel?