Riddlepedia Name _____ Date _____

Hard Riddles



48 riddles from easy to tricky. Write your answer on the line. Answers are on the last page.

Medium riddles ★★

1. I have a spine but no bones, a jacket but no arms, and I can tell you a whole story without ever opening my mouth. You have to open me instead. What am I?

   ANSWER _____

2. I'm made almost entirely of holes, yet I can hold you up all afternoon between two trees. What am I?

   ANSWER _____

3. The more of me you take, the more of me you leave behind you. What am I?

   ANSWER _____

4. I climb every mountain and cross every country, yet I never move an inch. What am I?

   ANSWER _____

5. Read me forward or backward and I'm the same word. I'm the moment the sun stands highest and both hands of the clock point straight up. What am I?

   ANSWER _____

6. I can be broken without being touched, kept without being held, and made without any tools. What am I?

   ANSWER _____

7. Two painters can paint two walls in two hours. How many walls can four painters paint in eight hours?

   ANSWER _____

8. The doctor gives you four pills and tells you to take one every 20 minutes. How many minutes will the pills last?

   ANSWER _____

9. A bat and a ball cost $1.10 together. The bat costs $1.00 more than the ball. How much does the ball cost?

   ANSWER _____

10. When I was 6 years old, my brother was half my age. Now I'm 40. How old is my brother?

    ANSWER _____

11. What walks on four legs in the morning, on two legs at noon and on three legs in the evening?

    ANSWER _____

12. Tom pushes his car along until he stops right in front of a hotel. The moment he gets there, he knows he's bankrupt. What's going on?

    ANSWER _____

Tricky riddles ★★★

13. Spell me out in English and my letters are in perfect alphabetical order. I'm the only number like that. Which number am I?

ANSWER _____

14. Two days ago I was 9 years old. Next year I'll turn 12. What's today's date, and when is my birthday?

ANSWER _____

15. How many times in one day do the hour hand and the minute hand of a clock point in exactly the same direction?

ANSWER _____

16. A drawer holds 10 black socks and 10 white socks, all mixed up. The room is pitch dark. How many socks must you take out to be sure you have two black ones?

ANSWER _____

17. You write out every whole number from 1 to 100. How many times do you write the digit 7?

ANSWER _____

18. A man rides into town on Friday. He stays for three nights and leaves on Friday. How is that possible?

ANSWER _____

19. Multiply together every digit on a phone keypad. What's the answer?

ANSWER _____

20. How many squares of any size are there on a chessboard?

ANSWER _____

21. Two trains start 100 km apart and drive toward each other at 50 km/h each. A bird starts at one train and flies at 75 km/h, back and forth between the trains, until they meet. How far does the bird fly?

ANSWER _____

22. You sit on me. Take away my first letter and I grow on your head. Take away one more letter and you breathe me. What am I?

ANSWER _____

23. Count up from one in English (one, two, three ...) and you'll go a very long time before you write the letter B. What's the first number that has a B in its name?

ANSWER _____

24. Sam's grandma is 74 years old, but she has only had 18 birthdays on her real birth date. How?

ANSWER _____

Very Hard Riddles (Tricky)

25. Three ants sit on the three corners of a triangle. Each one picks a direction at random and walks along an edge toward another corner. What's the chance that no two ants bump into each other?

ANSWER _____

26 I'm a three-digit number. My tens digit is 5 more than my ones digit, and my hundreds digit is 8 less than my tens digit. What number am I?

ANSWER _____

27 Today is Sunday. What day of the week will it be 1,000 days from now?

ANSWER _____

28 At a party, every guest shook hands exactly once with every other guest. There were 45 handshakes in all. How many guests were there?

ANSWER _____

29 Mia has just as many brothers as sisters. Each of her brothers has twice as many sisters as brothers. How many children are in the family?

ANSWER _____

30 What number comes next: 2, 3, 5, 9, 17, ...?

ANSWER _____

31 What letter comes next: M, V, E, M, J, S, U, ...?

ANSWER _____

32 There's a coin in one of three boxes. Box 1 says "The coin is in here." Box 2 says "The coin is not in here." Box 3 says "The coin is not in box 1." Exactly one label is true. Where is the coin?

ANSWER _____

33 Think of any number. Double it, add 12, cut the result in half, then subtract the number you started with. What's your answer?

ANSWER _____

34 A bag holds two coins: a normal one, and one with heads on both sides. You pull one out without looking, flip it, and it lands heads. What's the chance you're holding the two-headed coin?

ANSWER _____

35 2026 began on a Thursday and isn't a leap year. What's the next year that will use exactly the same calendar, with every date on the same day of the week?

ANSWER _____

36 You look at a clock in a mirror, and the clock seems to say 2:20. What time is it really?

ANSWER _____

37 The pages of a book are numbered 1, 2, 3 and so on. Printing all the page numbers took 192 digits. How many pages does the book have?

ANSWER _____

38 Ella is 24. She is twice as old as her brother was when Ella was as old as her brother is now. How old is her brother?

ANSWER _____

The 10 Hardest Riddles in the World

39 You're standing in front of two doors. One leads to freedom and the other to a maze you'll never escape. A guard stands at each door. One guard always tells the truth and the other always lies, but you don't know which is which. You may ask one guard one question. What do you ask?

ANSWER _____

40 A farmer must row a wolf, a goat and a cabbage across a river. His boat holds him and only one of them. Left alone together, the wolf eats the goat and the goat eats the cabbage. What must he carry first, and how many crossings does he need at the least?

ANSWER _____

41 You have two ropes and a lighter. Each rope takes exactly one hour to burn, but they burn unevenly, so half a rope doesn't mean half an hour. How do you measure exactly 45 minutes?

ANSWER _____

42 Four friends must cross a rickety bridge at night with one flashlight. The bridge holds two people at a time, and anyone crossing needs the flashlight. They cross in 1, 2, 7 and 10 minutes, and a pair walks at the slower one's speed. What's the shortest total time to get everyone across?

ANSWER _____

43 Ann, Ben and Cal stand in a line, all facing forward. Cal, at the back, can see Ben and Ann. Ben can see only Ann. Ann can't see anyone. They know their hats came from a bag of 3 red hats and 2 white hats. Cal says, "I don't know my hat's color." Then Ben says, "I don't know mine either." Ann says, "I know mine!" What color is Ann's hat?

ANSWER _____

44 Four houses stand in a row, numbered 1 to 4 from left to right. Each has a different color (red, blue, green, yellow), owner (Ada, Ben, Cy, Dee) and pet (cat, dog, fish, bird). The red house is house 1. Ada lives in the blue house. The green house is directly to the right of the blue house. The dog lives in the red house. Ben lives in house 4. The cat lives next door to Ada. Cy owns the bird. Who owns the fish?

ANSWER _____

45 You have two identical eggs and a 36-floor building. Below a certain floor an egg survives the drop, and from that floor up it breaks. What's the fewest drops that always lets you find that floor?

ANSWER _____

46 You're blindfolded at a table with 40 coins. Exactly 7 are heads up, and you can't feel which. How do you split the coins into two piles with the same number of heads in each?

ANSWER _____

47 What number comes next: 1, 4, 9, 61, 52, 63, ...?

ANSWER _____

48 A hallway has 200 closed lockers and 200 students. Student 1 opens every locker. Student 2 closes every 2nd locker. Student 3 changes every 3rd locker (opening it if closed, closing it if open), and so on, until student 200 changes only locker 200. How many lockers are open at the end?

ANSWER _____

Answers

Hard Riddles · answer key · print or fold this page away before you hand out the sheet

1. **A book**
2. **A hammock**
3. **Footsteps**
4. **A road**
5. **Noon**
6. **A promise**
7. **16 walls.** One painter paints one wall every two hours, so four painters paint four walls every two hours, and eight hours is four of those rounds.
8. **60 minutes.** You take the first one right away, then one at 20, 40 and 60 minutes.
9. **5 cents.** The bat then costs $1.05, which is $1.00 more, and together they make $1.10. If the ball cost 10 cents, the bat would cost $1.10 and the total would be $1.20.
10. **37.** He was 3 when I was 6, so he is always 3 years younger.
11. **A human.** A baby crawls, an adult walks on two legs, and an old person walks with a cane. This is the famous riddle of the Sphinx from Greek myth.
12. **He's playing Monopoly.** His car token landed on a property with a hotel, and he can't pay the rent.
13. **Forty.** F, O, R, T, Y are in alphabetical order. (Notice there's no U in it, unlike "four.")
14. **Today is January 1, and my birthday is December 31.** Two days ago (December 30) I was 9. Yesterday I turned 10, this December I turn 11, and next December I turn 12.
15. **22 times.** The minute hand catches up with the hour hand only 11 times every 12 hours, because between 11:00 and 1:00 they meet just once, at 12:00.
16. **12.** In the worst case, the first 10 socks you grab are all white, and then the next 2 must be black.
17. **20.** There are ten 7s in the ones place (7, 17, 27 … 97) and ten in the tens place (70 to 79).
18. **His horse is named Friday.**
19. **Zero.** The keypad has a 0, and anything multiplied by 0 is 0.
20. **204.** There are 64 small squares, 49 of size 2x2, 36 of 3x3, 25, 16, 9, 4, and 1 big 8x8 square: 64 + 49 + 36 + 25 + 16 + 9 + 4 + 1 = 204.
21. **75 km.** The trains close the gap at 100 km/h, so they meet after exactly one hour, and the bird flies for one hour at 75 km/h.
22. **A chair.** Chair, hair, air.
23. **One billion**
24. **She was born on February 29, 1952.** That date only comes in leap years, and there have been 18 of them since she was born (1956 to 2024).
25. **1 in 4.** There are 2 x 2 x 2 = 8 possible choices, and only 2 are safe: all clockwise or all counterclockwise. That's 2 out of 8.
26. **194.** The tens digit must be 9 (so the hundreds digit can be 1), which makes the ones digit 4.
27. **Saturday. 1,000 = 7 x 142 + 6, and 6 days after Sunday is Saturday.**
28. **10 guests. 10 x 9 / 2 = 45.**
29. **7 children: 4 girls and 3 boys.** Mia has 3 sisters and 3 brothers. Each boy has 4 sisters and 2 brothers.
30. **33.** Each number is double the one before, minus 1 (17 x 2 - 1 = 33). The gaps also double: 1, 2, 4, 8, 16.
31. **N.** They are the first letters of the planets in order from the Sun: Mercury, Venus, Earth, Mars, Jupiter, Saturn, Uranus, Neptune.
32. **Box 2.** Then label 1 is false, label 2 is false and label 3 is true. With the coin in box 1 or box 3, two labels would be true.

33. **6.** Doubling and halving cancel out, so you're left with your number plus 6, and then you take your number away.

34. **2 in 3.** Three faces could be the heads you're looking at: two belong to the two-headed coin and one belongs to the normal coin.

35. **2037.** From 2026 to 2037 the calendar shifts one weekday for each of the 8 normal years and two for each of the 3 leap years (2028, 2032, 2036): 14 days, exactly two weeks. And 2037 isn't a leap year either.

36. **9:40.** A mirrored time and the real time always add up to 12:00, and 2:20 + 9:40 = 12:00.

37. **100 pages.** Pages 1 to 9 use 9 digits and pages 10 to 99 use 180, which makes 189. The last 3 digits are page 100.

38. **18.** Six years ago Ella was 18 (her brother's age now), and her brother was 12. Today Ella is 24, which is twice 12.

39. **Ask either guard: "Which door would the other guard say leads to freedom?" Then take the other door. The liar lies about the honest answer, and the truth-teller honestly reports the lie, so both point to the wrong door.**

40. **The goat, in 7 crossings.** Goat over, return alone, wolf over, bring the goat back, cabbage over, return alone, goat over.

41. **Light rope 1 at both ends and rope 2 at one end.** When rope 1 burns out, 30 minutes have passed. Then light the other end of rope 2. It burns out 15 minutes later, making 45.

42. **17 minutes. 1 and 2 cross (2), 1 returns (1), 7 and 10 cross (10), 2 returns (2), 1 and 2 cross (2): 2 + 1 + 10 + 2 + 2 = 17.**

43. **Red.** Cal would know his hat is red if Ben and Ann both wore white, so at least one of them is red. If Ann's hat were white, Ben would then know his own is red. Ben didn't know, so Ann's hat must be red.

44. **Ada.** The blue house can't be house 2, because then Cy and the bird would have no house left. So blue is house 3 and green is house 4. Cy must be in house 2 with the bird, the cat is with Ben in house 4, and the fish is with Ada in house 3.

45. **8 drops.** Drop the first egg from floors 8, 15, 21, 26, 30, 33, 35 and 36. If it breaks, test the floors in the gap one at a time with the second egg. Each plan takes 8 drops at most, because 8 + 7 + 6 + 5 + 4 + 3 + 2 + 1 = 36.

46. **Slide any 7 coins into a new pile and flip all 7.** If that pile had h heads, the big pile has 7 - h heads, and after flipping, the small pile also has 7 - h heads.

47. **94.** These are the squares 1, 4, 9, 16, 25, 36 written backward, and the next square, 49, becomes 94.

48. **14.** Only perfect squares have an odd number of divisors, so the open lockers are the squares 1, 4, 9, 16 and so on, up to 196 (14 x 14).

Need a hint? Every riddle has one at riddlepedia.com/hard-riddles/, where you can also play them as a game.