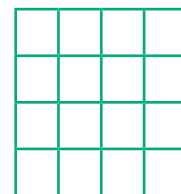


Puzzlers

1. I went on a train journey. I was asleep for $\frac{3}{4}$ hour and awake for $\frac{3}{4}$ of the journey. How long was the journey?

2. Draw a cross in 10 of the 16 small squares so that each row and column has an even number of crosses.



3. Is it correct to say “seven and five IS thirteen” or “seven and five ARE thirteen?”

4. I keep white mice and parrots as pets. Between them they have 15 heads and 50 legs. How many white mice do I have?



5. What digits do A and B stand for if:

i). $A + A + A = BA$

(if A is 2 and B is 3, then AB is 23)

ii). $AB + B = BA$

6. 25 people entered a knock-out tennis tournament. How many games were needed to decide the winner?

7. When my father was 31, I was 8. Now he is twice as old as I am. How old am I?

Puzzlers

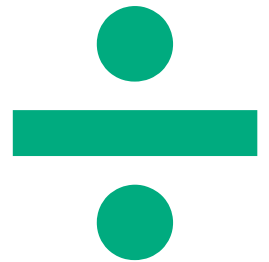
8. I bought a bicycle for \$50.
I sold it for \$60, then bought it back for \$70.
Finally I sold it for \$80. How much did I gain or lose?



9. What two whole numbers multiplied together make 31?

10. What number under 100 gives a remainder of:

- 1 when divided by 3
- 2 when divided by 4
- 3 when divided by 5
- and 4 when divided by 6?



11. A doctor gives you 10 pills and tells you to take one every half hour.
How long will they last?

12. Write down in figures the number which comes after five thousand and ninety-nine.

13. I thought of a number, multiplied it by itself, added the number, divided by the number and subtracted my number.

What is the answer?

14. What are the two missing numbers?

1, 3, 4, , , 18, 29, 47

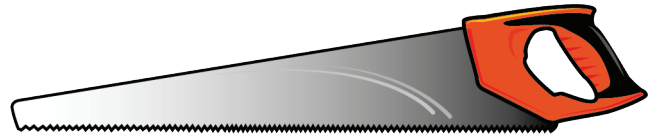
15. Use + signs and five 2s to make 28.
(digits may be combined; e.g., 222)

16. Use + signs and eight 8s to make 1000.
(digits may be combined; e.g., 88)



Puzzlers

17. I cut a 10 metre pole into 10 equal pieces, each cut took one minute. How long did it take me?



18. 9 8 7 6 5 4 3 2 1. Put + signs between some of the numbers (without changing their order) so that the total is 99.

19. 1 2 3 4 5 6 7. Put + signs between some of the numbers (without changing their order) so that the total is 100.

20. Cross out six of the digits in this sum so that the total remaining is 20.

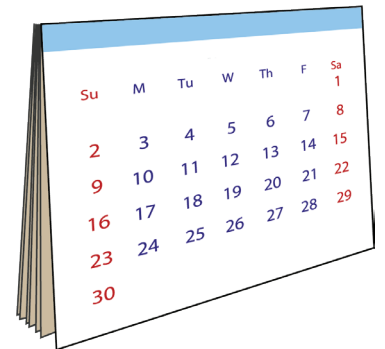
$$\begin{array}{r} 111 \\ 777 \\ + 999 \\ \hline \end{array}$$

21. How old am I? If you reverse the digits of my age, divide by three and then add 34, that's how old I am. How old am I? (Hint: I am between 30 and 60).

22. Which two consecutive months, apart from July and August, have 31 days each?

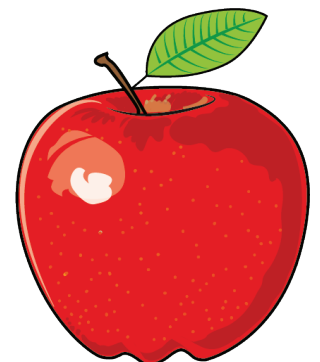
23. It says 11. After 2 more it says 1. What is it?

24. Write in figures eleven thousand, eleven hundred and eleven.



25. Make 100, using five 1s and any number of + and - signs.

26. Jane, Mary and Bill had some apples. Jane and Mary had 17 apples between them. Mary and Bill had 14 and Bill and Jane had 13. How many apples did Jane have?



Answers

Puzzlers

- 3 hours
- Neither ($7 + 5 = 12$)
- 10
- i) $A = 5, B = 1$
ii) $A = 8, B = 9$
- 24
- 23
- \$20 gain (two sales gaining \$10, buy price irrelevant)
- 1×31
- 58
- $4 \frac{1}{2}$ hours
- 5100
- 1
- 7, 11
- $22 + 2 + 2 + 2$
- $888 + 88 + 8 + 8 + 8$
- 9 min
- $9 + 8 + 7 + 65 + 4 + 3 + 2 + 1$ or
 $9 + 8 + 7 + 6 + 5 + 43 + 21$
- $1 + 2 + 34 + 56 + 7$ or
 $1 + 23 + 4 + 5 + 67$
- Cross out 1, 777 & 99
- 42
- Dec and Jan
- Watch or Clock
- 12111
- 111-11
- 8

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