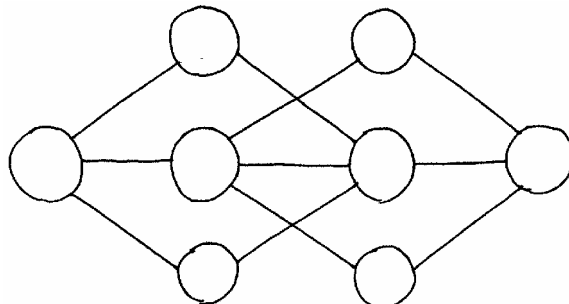
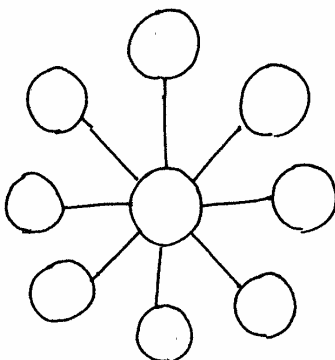


Math teasers

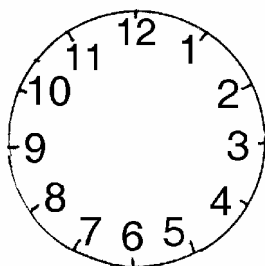
1. Use digits 1 through 8 to fill the circles below. But wait! Make sure that no line connects consecutive numbers. That means 3 can't join 2 or 4; 6 can't join 5 or 7 and so on.



2. Use numbers 4 through 12. Fill the circles so that the numbers on each straight line add up to 21.



3. Use two straight lines to divide this watch into 3 parts, so that the numbers in each of the sections add up to the same sum.



4. Can you make five 3's equal to 13? Here's how:
 $3 \times 3 + 3 + 3/3 = 13$

Now you try a few

- A. Make thirteen 1's equal to 13
- B. Make thirteen 2's equal to 13
- C. Make thirteen 9's equal to 13

5. Move one toothpick to correct

$$V| - |V = X|$$

$$X + |V = V$$

$$X| + X = ||$$

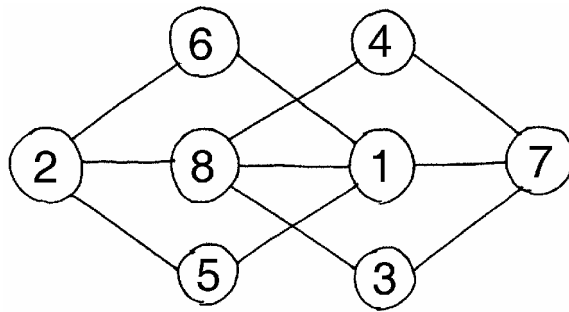
6. Farmer counts 9 heads and 24 legs. How many chickens and cows does he have?

7. Find 6 numbers whose sum is 123456. Each of the numbers can only use the digit 1.

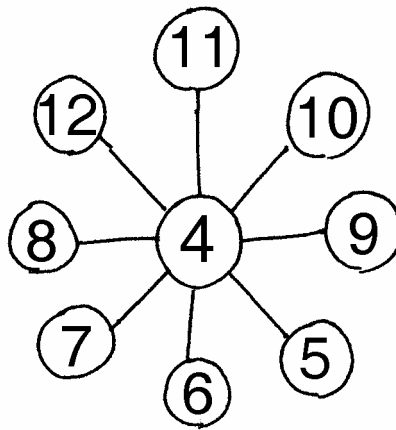
From Mad Maths by Sue Macy

Answers

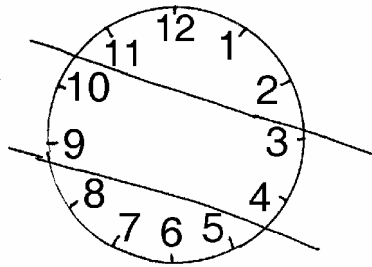
1.



2.



3.



4.

$$11 \times 1 + 11/11 + 111/111 = 13$$

$$22 - 2 - 2 - 2 - 22/22 - 2/2 - 2/2 = 13$$

$$9 / (99/99) + 9/9 + 9/9 + 9/9 + 9/9 = 13$$

5.

$$V| + |V = X$$

$$X - |V = V|$$

$$X| - |X = ||$$

6. 6 chickens and 3 cows

7.

```
  1
  1 1
 1 1 1
1 1 1 1
1 1 1 1 1
1 1 1 1 1 1
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