

One point per problem

1. On a business trip, Martha flew 331 mi. from Montreal, Canada, to New York City. She flew 10 times that distance from New York to Paris, France. She returned from Paris through New York and then on to Montreal. How many miles did she fly?
2. Sara, Sue, Steve, and Sam are brothers and sisters. Sam is twice Sue's age, but he is younger than Steve. In four years, Sara will be twice as old as Sue and Sam will be the age Sara is now. Steve is the oldest. List the family members from oldest to youngest.
3. Magena has a job in a shoe store. During the last 5 weeks she sold 160 pairs of shoes. Each week she sold 7 more pairs than the previous week. How many pairs of shoes did Magena sell the last week?
4. Six friends decide that they will call each other tonight. They want to talk to each other only once. How many calls will be made in all?
5. Kelli earns \$15/day babysitting, and Hollie earns \$8/day looking after the neighbors' pets. After how many days has Kelli earned \$42 more than Hollie?
6. Rachel wants to make a four sided pen in her backyard for her dog Skipper. She has 36 m of fencing for the penned region. What is the maximum area that can be fenced in?
7. After a health screening, Ms. Kato reported the following results: of the 25 students in her class, 11 need a dental check-up, 17 need an eye exam, and 5 need neither a dental check-up nor an eye exam. How many students need both?
8. The last Thursday of a certain month is the 27th day of that month. What day of the week was the first day of the month?
9. A store owner is stacking boxes for a window display. The top row will have one box. The second row will have three boxes. The third row will have five boxes. If this pattern continues, how many boxes will the fifteenth row have?
10. Three sisters shared their parent's inheritance. Jane got $\frac{1}{2}$ of the money. Sally got $\frac{1}{5}$ of the money. Ally got \$3,000. How much money was the total inheritance?
11. Jeff is $6\frac{7}{8}$ ft tall. Kayla is $5\frac{2}{3}$ ft. tall. Jeff is how many inches, to the nearest tenth, taller than Kayla?
12. The product of two consecutive pages in a book is 12, 432. The sum is 223. What are the page numbers?
13. Suppose a planet has two hemispheres. In each hemisphere there are three continents. On each continent there are four countries. In each country there are five states. How many states are on the planet?
14. If two carpenters can build one deck in one day, at the same rate, how many days will it take 6 carpenters to build 12 decks?

Two points per problem

15. The length of the smallest side of a triangle is 2 m less than the second side, and the length of the longest side is 4 m more than the second side. Find the length of the three sides of the triangle if the perimeter is 32 m.
16. Find a number between 1 and 50 that satisfies these conditions. If it is divided by 3 or 5, the remainder is 1. If it is divided by 7, the remainder is 4.
17. Find the next 3 terms in the following: 1, 3, 6, 10, ____, ____, ____.

School Name _____

JR. HIGH MATH LEAGUE

Problem Solving

GROUP 7-II TEST B

Spring 2001

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1. _____ mi.
2. _____, _____, _____, _____
3. _____ shoes sold the last week
4. _____ phone calls
5. _____ days
6. _____ square meters
7. _____ need both
8. _____
9. _____ boxes
10. \$ _____
11. _____ inches taller
12. _____, _____
13. _____ states
14. _____ days

Two points per problem

15. smallest side = _____ meters
second side = _____ meters
longest side = _____ meters
16. _____
17. _____, _____, _____