

Fractions – mixed operations word problems

Grade 5 Word Problems Worksheet

1. Of the 95 children in 6th grade, $\frac{3}{5}$ went to holiday parties. How many students went to holiday parties in all?
2. Amy has 72 sweets in a bag. She keeps $\frac{1}{4}$ of them for herself and shares the rest with friends. How many sweets will she give to her friends?
3. A train arrives at the station with 150 passengers on board. $\frac{2}{5}$ of the passengers get off the train in Seattle, and then 35 passengers board the train. How many passengers are on the train when it leaves the station?
4. 30 people watched the soccer game last night. Tickets cost \$2.75 each. Half of these fans bought a program at \$1.50 each. How much money was collected?



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5. Dean buys 25 stickers on Monday and 17 on Tuesday, On Wednesday he gives $\frac{1}{6}$ of his stickers to Jack. How many does he have left?
6. On six bookshelves, there are 72 books per shelf. How many books are there altogether? If $\frac{1}{3}$ of these are non-fiction, how many fictional books are there?
7. Of 100 children in Grades 5 and 6, three-quarters have pets; 40 children have a dog, and 18 children have a cat. How many children have other kinds of pets?
8. Steven says, "I would rather have $\frac{5}{9}$ of \$72 than $\frac{4}{6}$ because I will get more to spend." Is he correct?

Answers

- $95 \times \frac{3}{5} = 57$
57 students went to holiday parties.
- She keeps $72 \times \frac{1}{4} = 18$ sweets.
She gives away $72 - 18 = 54$ sweets.
She gives away 54 sweets.
- $150 \times \frac{2}{5} = 60$ people get off
 $150 - 60 + 35 = 125$
125 passengers are on board the train when it leaves the station.
- $30 \times 2.75 = 82.50$ collected for tickets
 $\frac{1}{2}$ of the people bought a program, so $30 \times \frac{1}{2} = 15$ bought programs.
 $15 \times 1.50 = 22.50$ collected for programs
 $82.50 + 22.50 = 105$
They collected \$105.
- $25 + 17 = 42$ total stickers. He gave away $42 \times \frac{1}{6} = 7$.
 $42 - 7 = 35$
He has 35 stickers left.
- $6 \times 72 = 432$ books total
 $432 \times \frac{1}{3} = 144$ non-fiction
 $432 - 144 = 288$
There are 288 fictional books.
- $100 \times \frac{3}{4} = 75$, so 75 children have pets.
 $75 - 40 - 18 = 17$
17 children have other kinds of pets.
- $72 \times \frac{5}{9} = 40$
 $72 \times \frac{4}{6} = 48$
He is wrong because $\frac{4}{6}$ would give him \$48 instead of \$40.