



Mixed operations word problems

Grade 4 Word Problems Worksheet

A play center has an indoor playground and 4 party rooms. Children can go in to play or have their birthday parties there.

1. The center is open for 11 hours each day. Each party takes 3 hours. What is the maximum number of parties the center can host in a day?
2. If the center hosts the maximum number of parties, how much time is left to clean each party room between parties?
3. There is a limit of 85 children in the indoor playground. If there are 47 children playing in the playground, how many more children can the staff let in?





- The party host can bring 20 children to the indoor playground. If there are two parties in the play center, how many more children can the staff let in?
- The party room costs \$48 to rent. If there are more than 20 children, the center will charge each extra guest \$3. How much will a party of 28 children cost?
- Write an equation using "x" and then solve the equation. The play center charges each child \$6 of admission. If there are x children, the play center receives \$402 for admission.



Answers

1. $11 \div 3 = 3$ remainder 2
Each room can host 3 parties each day.
 $3 \times 4 = 12$
The center can host up to 12 parties in a day.
2. Each room will host 3 parties, each lasting 3 hours.
Total party time $3 \times 3 = 9$ hours
Total time the center is open = 11 hours
Time left for cleaning = 11 hours – 9 hours = 2 hours = 120 minutes.
Time left after each party = $120 \div 3 = 40$ minutes/party.
3. $85 - 47 = 38$
The staff can let in 38 more children.
4. $85 - (20 \times 2) = 45$
The staff can let in 45 more children.
5. $28 - 20 = 8$
There are 8 extra guests.
 $48 + (3 \times 8) = \$72$
A party of 28 children costs \$72.
6. $6x = 402$
 $x = 67$
There were 67 children.