Write equations with variables

Grade 5 Math Word Problems Worksheet

1. Josh sent out invitations to 16 friends for his birthday party. \( x \) friends replied and he is waiting for the other 7 friends to reply. Find \( x \).

2. Ben bought 4 packs of balloons for his child’s birthday. Each pack of balloons comes with \( h \) balloons. There are 24 balloons in total. Find \( h \).

3. Sophia ordered \( s \) pizzas for 24 guests at a party. Each guest will have \( \frac{1}{6} \) of a pizza. Find \( s \).
4. There are \( n \) guests at Owen's birthday party. \( \frac{2}{3} \) of the guests at his party are boys. There are 12 boys at the party. Find \( n \).

5. Ashley bought 2 boxes of small toys of party favors for her daughter's birthday party. The bigger box contains \( t \) toys and the smaller box contains 12 toys. She bought a total of 28 toys. Find \( t \).

6. Liam rented a hall for a party. The party hall charges $200 for the hall and $k for each person attending the party. There are 24 people attending the party, and Liam paid the party hall $560. Find \( k \).
Answers

1. $16 - x = 7$
   $x = 9$

2. $4h = 24$
   $h = 6$

3. $\frac{s}{24} = \frac{1}{6}$
   $s = \frac{1}{6} \times 24$
   $s = 4$

4. $\frac{2n}{3} = 12$
   $2n = 36$
   $n = 18$

5. $t + 12 = 28$
   $t = 16$

6. $200 + 24k = 560$
   $24k = 360$
   $k = 15$