Write expressions with variables

Grade 5 Word Problems Worksheets

Write expressions for the following unknowns.

1. In a zoo, there were 36 exhibits, but \( k \) exhibits were closed. Write the expression for the number of exhibits that were open.

2. The zoo is open for 9 hours on weekdays. On weekends, the zoo is open for \( r \) more hours. Write the expression for the number of hours the zoo opens on weekends.

3. In the lion exhibit in the zoo, there are \( n \) lions. \( \frac{3}{5} \) of the lions are female. Write the expression for the number of female lions.

4. The zoo needs to hire \( b \) staff members for each exhibit. Write the expression for the number of staff members they need to hire for 20 exhibits.

5. There were \( e \) visitors at the zoo over a 3-day long weekend. Write the expression for the number of visitors that visited each day.

6. Oliver went to the zoo with 5 other friends. They have a coupon for $10 off of admission for groups of 5 or more. The admission for each person is $\( d \). Write the expression for the amount each of them needs to pay after the discount.
Answers

1. $36 - k$
2. $9 + r$
3. $\frac{3n}{5}$
4. $20b$
5. $\frac{e}{3}$
6. $\frac{6d - 10}{6}$