## Writing expressions with variables

Grade 5 Word Problems Worksheet

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. $\frac{3 n}{5}$
4. $20 b$
5. $\frac{e}{3}$
6. $\frac{6 d-10}{6}$
