Fraction word problems

Grade 5 Word Problems Worksheets

Read and answer each question:

An aquarium has exhibits that feature different marine animals.

1. \(\frac{5}{8}\) of the staff are male. \(\frac{5}{12}\) of the staff works part time at the aquarium. What is the fraction of the staff being female?

2. The sharks are fed three times a day. During the morning feeding, \(\frac{2}{15}\) tons of fish is fed. During the afternoon feeding, the weight of fish fed will be \(\frac{1}{15}\) ton more than the fish fed during the morning. If the total weight of fish fed in a day is \(\frac{1}{2}\) ton, how much is fed during the feeding at night?

3. A baby otter was born \(\frac{3}{4}\) of a month early. At birth, its weight was \(\frac{7}{8}\) kilograms, which is \(\frac{9}{10}\) kilogram less than the average weight of newborn otter in the aquarium. What is the average weight of newborn otter?

4. The penguin nursery is open two times a day: \(\frac{2}{3}\) hour at noon and \(\frac{5}{12}\) hour in the afternoon. How much time is the penguin nursery open every day?

5. Two kinds of fish can be found in a small tank that is \(5\frac{1}{7}\) feet long. A blue fish is \(\frac{2}{15}\) foot long and an orange fish is \(\frac{7}{10}\) foot long. How much longer is the orange fish?

6. An octopus weighed \(\frac{5}{6}\) kilogram. After two weeks, its weight was increased by \(\frac{3}{10}\) kilogram. But afterwards, it lost \(\frac{1}{5}\) kilogram in weight as it was sick. What is its current weight?
Answers

1. \[ 1 - \frac{5}{8} = \frac{3}{8} \]

\[ \frac{3}{8} \text{ of the staff are female.} \]

2. \[ \frac{1}{2} - \left( \frac{2}{15} + \frac{2}{15} + \frac{1}{15} \right) = \frac{1}{2} - \frac{5}{15} = \frac{15}{30} - \frac{10}{30} = \frac{5}{30} = \frac{1}{6} \]

\[ \frac{1}{6} \text{ ton of fish is fed during the feeding at night.} \]

3. \[ \frac{7}{8} + \frac{9}{10} = 1 \frac{31}{40} \]

The average weight of newborn otter is \( 1 \frac{31}{40} \) kilogram.

4. \[ \frac{2}{3} + \frac{5}{12} = 1 \frac{1}{12} \]

The penguin nursery opens \( 1 \frac{1}{12} \) hour.

5. \[ \frac{7}{10} - \frac{2}{15} = \frac{17}{30} \]

The orange fish is \( \frac{17}{30} \) feet longer than the blue fish.

6. \[ \frac{5}{6} + \frac{3}{10} - \frac{1}{5} = \frac{14}{15} \]

The current weight of the octopus is \( \frac{14}{15} \) kilogram.