

Read each item and determine the answer by adding or multiplying. Assume that all cats and kittens are not spayed or neutered. Find out how many kittens Rosa will produce in just 3 years.



Name: _____

Date: _____

CAT MATH



Rosa

1. Rosa is an unspayed female cat. When she was just over a year old, she had her first litter of 7 kittens. Later that year, she had another 5 kittens. How many cats total are there now (including Rosa)?

$$\frac{\quad}{\text{Rosa}} + \frac{\quad}{\text{1st litter}} + \frac{\quad}{\text{2nd litter}} = \frac{\quad}{\text{total cats \& Kittens, year 1}}$$

2. In the second year, all the kittens are now old enough to have kittens. (Kittens can get pregnant as early as 4 months old!) There is an average of 8 new kittens for all of their litters this year including Rosa.

(a) How many new kittens are born?

$$\frac{\quad}{\text{total from \#1}} \times \frac{\quad}{\text{average \# per litter}} = \frac{\quad}{\text{new kittens}}$$

(b) How many cats and kittens are there now, counting Rosa and her original kittens?

$$\frac{\quad}{\text{total from \#1}} + \frac{\quad}{\text{\# new kits from (2a)}} = \frac{\quad}{\text{new total, year 2}}$$

3. In the third year, Rosa and her children all have an average of 7 more kittens.

(a) Find out how many new kittens are born

$$\frac{\quad}{\text{total from \#1}} \times \frac{\quad}{\text{average \# per litter}} = \frac{\quad}{\text{new kittens}}$$

(b) Additionally, the new kittens (from 2a) are now old enough to have their own kittens! These kittens all have an average of 6 kittens.

$$\frac{\quad}{\text{new kittens from 2(a)}} \times \frac{\quad}{\text{average \# per litter}} = \frac{\quad}{\text{new kittens}}$$

(c) Now find the total number of cats and kittens that were produced because of one, unspayed female cat in just 3 years.

$$\frac{\quad}{\text{total from 2 (b)}} + \frac{\quad}{\text{new kittens from 3(a)}} + \frac{\quad}{\text{new kittens from 3(b)}} = \frac{\quad}{\text{TOTAL NUMBER OF KITTENS IN 3 YEARS!}}$$