Cindy's Cats

T1

This problem gives you the chance to:
- solve fraction problems in a practical context

Cindy has 3 cats: Sammy, Tommy and Suzi.

1. Cindy feeds them on Cat Crunchies.

   Each day Sammy eats $\frac{1}{2}$ of the box, Tommy eats $\frac{1}{8}$ of the box and Suzi eats $\frac{1}{4}$ of the box.

   What fraction of a whole box do the cats eat, in all, each day? 7/8

   Show how you figured this out.

   $\frac{1}{2} + \frac{1}{8} + \frac{1}{4}$

   $\frac{4}{8} \quad \frac{1}{8} \quad \frac{2}{8}$ (11)

   4, 1, 2, 7

2. Tommy and Suzi spend much of each day sleeping.

   Tommy sleeps for $\frac{3}{5}$ of the day and Suzi sleeps for $\frac{7}{10}$ of the day.

   Which of the two cats sleeps for longer? Suzi

   How much longer does it sleep each day? 1/10

   Show how you figured this out.

   $\frac{6}{10} = \frac{3}{5} \quad \frac{7}{10}$

   $\frac{6}{10} \quad \frac{7}{10}$

T1

3. Cindy's cats often share a carton of cat milk.

Sammy always drinks $\frac{1}{3}$ of the carton, Tommy always drinks $\frac{5}{12}$ of the carton, and Suzi always drinks $\frac{1}{6}$ of the carton.

What fraction of the carton of cat milk is left over? 1/12

Show how you figured it out.

$\frac{1}{3}$ $\frac{1}{6}$ $\frac{5}{12}$ $\frac{5}{2}$ $\frac{11}{12}$ $\frac{12}{12}$

$\frac{4}{12}$ $\frac{2}{12}$ $\frac{4}{11}$

4. Cindy's cats love to jump in and out of their cat door.

Yesterday the cat door was used 100 times by her cats.

Sammy used it for $\frac{1}{4}$ of the times and Tommy used it for $\frac{3}{10}$ of the times.

How many times did Suzi use the cat door? 45 times

Explain how you figured it out.

First, I added $\frac{1}{4}$ and $\frac{3}{10}$. Since it is difficult to do this, I made the denominator 20, and when I added it up, I got $\frac{11}{20}$. $\frac{11}{20}$ equals $\frac{55}{100}$, so I got 45 when I subtracted 55 from 100.

$\frac{11}{20} = \frac{55}{100}$ $\frac{100}{-55}$ $\frac{6}{20}$ $\frac{5}{20} = \frac{11}{20}$ $\frac{3}{10}$ $\frac{1}{4} = \frac{5}{20}$ $\frac{6}{20}$

8

Cindy's Cats

This problem gives you the chance to:
- solve fraction problems in a practical context

T2

Cindy has 3 cats: Sammy, Tommy and Suzi.

1. Cindy feeds them on Cat Crunchies.

   Each day Sammy eats $\frac{1}{2}$ of the box, Tommy eats $\frac{1}{8}$ of the box and Suzi eats $\frac{1}{4}$ of the box.

   What fraction of a whole box do the cats eat, in all, each day? $\frac{3}{4}$

   Show how you figured this out.

2. Tommy and Suzi spend much of each day sleeping.

   Tommy sleeps for $\frac{3}{5}$ of the day and Suzi sleeps for $\frac{7}{10}$ of the day.

   Which of the two cats sleeps for longer? Suzi

   How much longer does it sleep each day? $\frac{1}{10}$

   Show how you figured this out.

$\frac{3}{5} = \frac{12}{20}$ $\frac{7}{10} = \frac{14}{20}$ $\frac{14}{20} - \frac{12}{20} = \frac{2}{20}$ or $\frac{1}{10}$

T2

3. Cindy's cats often share a carton of cat milk.

Sammy always drinks $\frac{1}{3}$ of the carton, Tommy always drinks $\frac{5}{12}$ of the carton, and Suzi always drinks $\frac{1}{6}$ of the carton.

What fraction of the carton of cat milk is left over? $\frac{1}{12}$

Show how you figured it out.

$\frac{1}{3}+\frac{1}{6}+\frac{5}{12}=\frac{11}{12}=\frac{1}{12}$ left

4. Cindy's cats love to jump in and out of their cat door.

Yesterday the cat door was used 100 times by her cats.

Sammy used it for $\frac{1}{4}$ of the times and Tommy used it for $\frac{3}{10}$ of the times.

How many times did Suzi use the cat door? 45

Explain how you figured it out.

$\frac{1}{4}=25+\frac{3}{10}=30+25=55$ $100-55=45$

8

Cindy's Cats

This problem gives you the chance to:
- solve fraction problems in a practical context

T3

Cindy has 3 cats: Sammy, Tommy and Suzi.

1. Cindy feeds them on Cat Crunchies.

   Each day Sammy eats $\frac{1}{2}$ of the box, Tommy eats $\frac{1}{8}$ of the box and Suzi eats $\frac{1}{4}$ of the box.

   What fraction of a whole box do the cats eat, in all, each day? $\frac{7}{8}$

   Show how you figured this out.

2. Tommy and Suzi spend much of each day sleeping.

   Tommy sleeps for $\frac{3}{5}$ of the day and Suzi sleeps for $\frac{7}{10}$ of the day.

   Which of the two cats sleeps for longer? Suzi

   How much longer does it sleep each day? $\frac{1}{10}$

   Show how you figured this out.

T3

3. Cindy's cats often share a carton of cat milk.

Sammy always drinks $\frac{1}{3}$ of the carton, Tommy always drinks $\frac{5}{12}$ of the carton, and Suzi always drinks $\frac{1}{6}$ of the carton.

What fraction of the carton of cat milk is left over? $\frac{1}{12}$

Show how you figured it out.

4. Cindy's cats love to jump in and out of their cat door.

Yesterday the cat door was used 100 times by her cats.

Sammy used it for $\frac{1}{4}$ of the times and Tommy used it for $\frac{3}{10}$ of the times.

How many times did Suzi use the cat door? $\frac{9}{20}$

Explain how you figured it out.

I added the fractions after I found a fraction whale they both add up to.

Cindy's Cats

T4

This problem gives you the chance to:
- solve fraction problems in a practical context

Cindy has 3 cats: Sammy, Tommy and Suzi.

1. Cindy feeds them on Cat Crunchies.

   Each day Sammy eats $\frac{1}{2}$ of the box, Tommy eats $\frac{1}{8}$ of the box and Suzi eats $\frac{1}{4}$ of the box.

   What fraction of a whole box do the cats eat, in all, each day? 7/8

   Show how you figured this out.

   1/2, 1/8, 1/4 = 4/8, 1/8, 2/8

   4/8
   + 1/8
   2/8
   7/8

2. Tommy and Suzi spend much of each day sleeping.

   Tommy sleeps for $\frac{3}{5}$ of the day and Suzi sleeps for $\frac{7}{10}$ of the day.

   Which of the two cats sleeps for longer? Suzi

   How much longer does it sleep each day? 1/10

   Show how you figured this out.

   3/5 and 7/10 = 6/5 and 7/10

   7/10
   - 6/10
   1/10

T4

3. Cindy's cats often share a carton of cat milk.

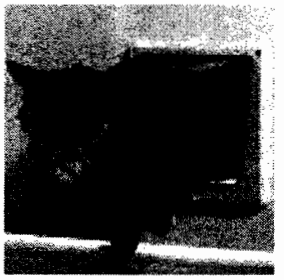
Sammy always drinks $\frac{1}{3}$ of the carton, Tommy always drinks $\frac{5}{12}$ of the carton, and Suzi always drinks $\frac{1}{6}$ of the carton.

What fraction of the carton of cat milk is left over? 11/12 X

Show how you figured it out.

1/3, 5/12 and 1/6 = 4/12, 5/12 and 2/12

4/12
+ 5/12
2/12
11/12



4. Cindy's cats love to jump in and out of their cat door.

Yesterday the cat door was used 100 times by her cats.

Sammy used it for $\frac{1}{4}$ of the times and Tommy used it for $\frac{3}{10}$ of the times.

1/4 = 25% , 3/10 = 30%

How many times did Suzi use the cat door? 45 times

Explain how you figured it out.

I changed Sammy and Tommy's Fractions into percents added them together, then I subtracted from that from 100 and that was my answer.

Cindy's Cats

This problem gives you the chance to:
- solve fraction problems in a practical context

T5

Cindy has 3 cats: Sammy, Tommy and Suzi.

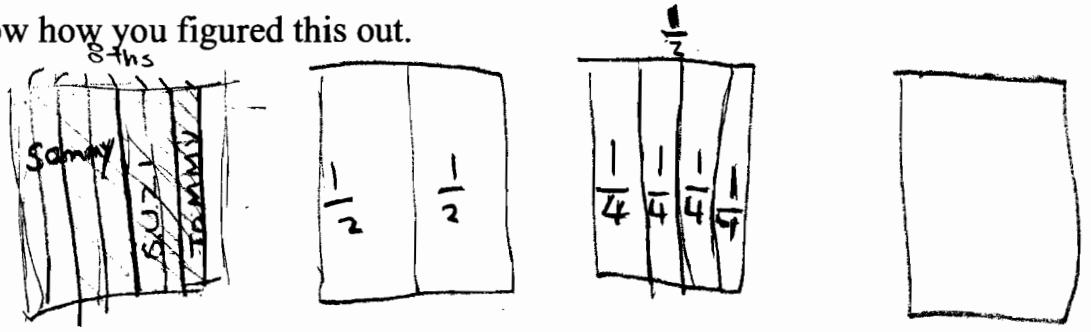
1. Cindy feeds them on Cat Crunchies.

   Each day Sammy eats $\frac{1}{2}$ of the box, Tommy eats $\frac{1}{8}$ of the box and Suzi eats $\frac{1}{4}$ of the box.

   What fraction of a whole box do the cats eat, in all, each day? $\frac{7}{8}$

   Show how you figured this out.

$\frac{1}{2}$ of a half is $\frac{1}{4}$. $\frac{1}{2}$ of a forth is $\frac{1}{8}$



2. Tommy and Suzi spend much of each day sleeping.

   Tommy sleeps for $\frac{3}{5}$ of the day and Suzi sleeps for $\frac{7}{10}$ of the day.

   Which of the two cats sleeps for longer? Suzi

   How much longer does it sleep each day? .1

   Show how you figured this out.

$\frac{3}{5} = .6$ $\frac{7}{10} = .7$

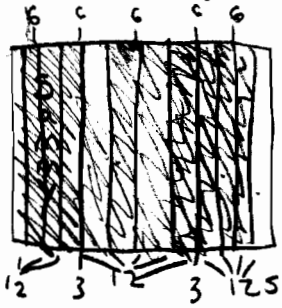
$$\begin{array}{r} .7 \\ -.6 \\ \hline .1 \end{array}$$

3. Cindy's cats often share a carton of cat milk.

Sammy always drinks $\frac{1}{3}$ of the carton, Tommy always drinks $\frac{5}{12}$ of the carton, and Suzi always drinks $\frac{1}{6}$ of the carton.

What fraction of the carton of cat milk is left over? $\frac{11}{12}$

Show how you figured it out.



3 = thirds
6 = sixths
12 = twelfths

4. Cindy's cats love to jump in and out of their cat door.

Yesterday the cat door was used 100 times by her cats.

Sammy used it for $\frac{1}{4}$ of the times and Tommy used it for $\frac{3}{10}$ of the times.

How many times did Suzi use the cat door? .27 of the times

Explain how you figured it out.

$\frac{1}{4} = .25$

$\frac{3}{10} = .3$

$.25 + .3 = .28$ $1.0 - .28 = .27$

8

Cindy's Cats

This problem gives you the chance to:
• solve fraction problems in a practical context

S1

Cindy has 3 cats: Sammy, Tommy and Suzi.

1. Cindy feeds them on Cat Crunchies.

   Each day Sammy eats $\frac{4}{28}$ of the box, Tommy eats $\frac{1}{8}$ of the box and Suzi eats $\frac{2}{8}$ of the box.

   What fraction of a whole box do the cats eat, in all, each day? 7/8 of a box

   Show how you figured this out.

   .125
   .500
   .250
   .875 which is = 7/8

2. Tommy and Suzi spend much of each day sleeping.

   Tommy sleeps for $\frac{6}{50}$ of the day and Suzi sleeps for $\frac{7}{10}$ of the day.

   Which of the two cats sleeps for longer? Suzi

   How much longer does it sleep each day? _____

   Show how you figured this out.

   3/5 is 60% with 7/10 is 70%

3. Cindy's cats often share a carton of cat milk.

Sammy always drinks $\frac{4}{12}$ of the carton, Tommy always drinks $\frac{5}{12}$ of the carton, and Suzi always drinks $\frac{2}{12}$ of the carton.

What fraction of the carton of cat milk is left over? 1/12

Show how you figured it out.

I figured out what the fractions equal. 11/12 was the total of the milk carton out of all the kittens, so 1/12 is left over of the carton.

4. Cindy's cats love to jump in and out of their cat door.

Yesterday the cat door was used 100 times by her cats.

Sammy used it for $\frac{1}{4}$ of the times and Tommy used it for $\frac{3}{10}$ of the times.

25% 30%

How many times did Suzi use the cat door? 45

Explain how you figured it out.

1/4 of the times out of 100 is 25 times Sammy used. 3/10 of the times is 30 times Tommy used. So add that together it equals 55 times for both, subtract is the next step 100-55 = 45, which is how many times Suzi went out the cat door.

Cindy's Cats

S2

This problem gives you the chance to:
- solve fraction problems in a practical context

Cindy has 3 cats: Sammy, Tommy and Suzi.

1. Cindy feeds them on Cat Crunchies.

   Each day Sammy eats $\frac{1}{2}$ of the box, Tommy eats $\frac{1}{8}$ of the box and Suzi eats $\frac{1}{4}$ of the box.

   What fraction of a whole box do the cats eat, in all, each day? $\frac{7}{8}$

   Show how you figured this out.

   $\frac{1}{2} = \frac{4}{8} + \frac{1}{8} + \frac{1}{4} = \frac{2}{8}$

2. Tommy and Suzi spend much of each day sleeping.

   Tommy sleeps for $\frac{3}{5}$ of the day and Suzi sleeps for $\frac{7}{10}$ of the day.

   Which of the two cats sleeps for longer? Suzi

   How much longer does it sleep each day? $\frac{1}{10}$

   Show how you figured this out.

   $\frac{3}{5} = \frac{6}{10} + \frac{7}{10} = 1\frac{1}{10}$

3. Cindy's cats often share a carton of cat milk.

Sammy always drinks $\frac{1}{3}$ of the carton, Tommy always drinks $\frac{5}{12}$ of the carton, and Suzi always drinks $\frac{1}{6}$ of the carton.

What fraction of the carton of cat milk is left over? $\frac{1}{12}$

Show how you figured it out.

$\frac{1}{3} = \frac{4}{12} + \frac{1}{6} = \frac{2}{12} + \frac{5}{12} = \frac{11}{12}$

4. Cindy's cats love to jump in and out of their cat door.

Yesterday the cat door was used 100 times by her cats.

Sammy used it for $\frac{1}{4}$ of the times and Tommy used it for $\frac{3}{10}$ of the times.

How many times did Suzi use the cat door? 45 %

Explain how you figured it out.

I divided 1 by 4 and got 25%. and divided 3 by 10 and got 30%.

Cindy's Cats

This problem gives you the chance to:
• solve fraction problems in a practical context

S3

Cindy has 3 cats: Sammy, Tommy and Suzi.

1. Cindy feeds them on Cat Crunchies.

   Each day Sammy eats $\frac{1}{2}$ of the box, Tommy eats $\frac{1}{8}$ of the box and Suzi eats $\frac{1}{4}$ of the box.

   What fraction of a whole box do the cats eat, in all, each day? $\frac{7}{8}$

   Show how you figured this out.

   $\frac{1}{2} = \frac{4}{8}$ $\quad \frac{1}{4} = \frac{2}{8}$

2. Tommy and Suzi spend much of each day sleeping.

   Tommy sleeps for $\frac{3}{5}$ of the day and Suzi sleeps for $\frac{7}{10}$ of the day.

   Which of the two cats sleeps for longer? Suzi

   How much longer does it sleep each day? $\frac{1}{10}$ of the day

   Show how you figured this out.

   $\frac{3}{5} \times 2 = \frac{6}{10} < \frac{7}{10}$

3. Cindy's cats often share a carton of cat milk.

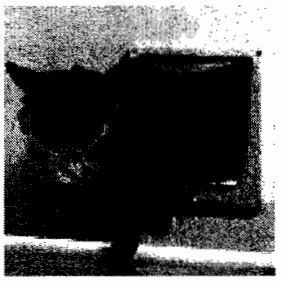
Sammy always drinks $\frac{1}{3}$ of the carton, Tommy always drinks $\frac{5}{12}$ of the carton, and Suzi always drinks $\frac{1}{6}$ of the carton.

What fraction of the carton of cat milk is left over? $\frac{1}{12}$

Show how you figured it out.

1. $\frac{1}{3} = \frac{4}{12}$
$\frac{1}{6} = \frac{2}{12}$
$\frac{5}{12} = \frac{5}{12}$

2. $\frac{4}{12} + \frac{2}{12} + \frac{5}{12} = \frac{11}{12}$



4. Cindy's cats love to jump in and out of their cat door.

Yesterday the cat door was used 100 times by her cats.

Sammy used it for $\frac{1}{4}$ of the times and Tommy used it for $\frac{3}{10}$ of the times.

How many times did Suzi use the cat door? 45

Explain how you figured it out.

Sammy jumped 25 times. Tommy jumped 30 times. $25+30=55$ $100-55=45$

Cindy's Cats

This problem gives you the chance to:
• solve fraction problems in a practical context

S4

Cindy has 3 cats: Sammy, Tommy and Suzi.

1. Cindy feeds them on Cat Crunchies.

   Each day Sammy eats $\frac{1}{2}$ of the box, Tommy eats $\frac{1}{8}$ of the box and Suzi eats $\frac{1}{4}$ of the box.

   What fraction of a whole box do the cats eat, in all, each day? $\frac{7}{8}$

   Show how you figured this out.

   I evened out the denominators:

   $\frac{1}{2} = \frac{4}{8}$ $\frac{1}{8} = \frac{1}{8}$ $\frac{1}{4} = \frac{2}{8}$ all added together is:

   $\frac{4}{8} + \frac{1}{8} + \frac{2}{8} = \frac{7}{8}$

2. Tommy and Suzi spend much of each day sleeping.

   Tommy sleeps for $\frac{3}{5}$ of the day and Suzi sleeps for $\frac{7}{10}$ of the day.

   Which of the two cats sleeps for longer? Suzi

   How much longer does it sleep each day? $\frac{1}{10}$ of a day

   Show how you figured this out.

   I made the denominators equal:

   $\frac{3}{5} = \frac{6}{10} < \frac{7}{10}$

3. Cindy's cats often share a carton of cat milk.

Sammy always drinks $\frac{1}{3}$ of the carton, Tommy always drinks $\frac{5}{12}$ of the carton, and Suzi always drinks $\frac{1}{6}$ of the carton.

What fraction of the carton of cat milk is left over? $\frac{2}{12} = \frac{1}{6}$

Show how you figured it out.

$\frac{1}{3} = \frac{4}{12}$ $\frac{1}{6} = \frac{2}{12}$ $\frac{5}{12} = \frac{5}{12}$

4. Cindy's cats love to jump in and out of their cat door.

Yesterday the cat door was used 100 times by her cats.

$\frac{3}{10}$ $\frac{12}{40}$ Sammy used it for $\frac{1}{4}$ of the times and Tommy used it for $\frac{3}{10}$ of the times.

How many times did Suzi use the cat door? $\frac{18}{40}$

$\frac{1}{4}$ $\frac{10}{40}$ Explain how you figured it out.

I made $\frac{1}{4}$ and $\frac{3}{10}$ have equal denomonators (40). Then, I added them up ($\frac{12}{40} + \frac{10}{40} = \frac{22}{40}$). I subtracted 22 out of 40 and got 18. I put the 18 over the 40 40 create $\frac{18}{40}$.

$\frac{18}{40}$

8

Cindy's Cats

This problem gives you the chance to:
- solve fraction problems in a practical context

S5

Cindy has 3 cats: Sammy, Tommy and Suzi.

1. Cindy feeds them on Cat Crunchies.

   Each day Sammy eats $\frac{1}{2}$ of the box, Tommy eats $\frac{1}{8}$ of the box and Suzi eats $\frac{1}{4}$ of the box.

   What fraction of a whole box do the cats eat, in all, each day? 7/8

   Show how you figured this out.

   $\frac{1}{2}$ of $8 = \frac{4}{8}$ $\frac{1}{4}$ of $8 = \frac{2}{8}$

   $\frac{4}{8} + \frac{2}{8} + \frac{1}{8} = \frac{7}{8}$

2. Tommy and Suzi spend much of each day sleeping.

   Tommy sleeps for $\frac{3}{5}$ of the day and Suzi sleeps for $\frac{7}{10}$ of the day.

   Which of the two cats sleeps for longer? Suzi

   How much longer does it sleep each day? 1/10

   Show how you figured this out.

   $\frac{3}{5} \cdot 2 = \frac{6}{10}$ is less than $\frac{7}{10}$

   $\frac{7}{10} - \frac{6}{10} = \frac{1}{10}$

3. Cindy's cats often share a carton of cat milk.

Sammy always drinks $\frac{1}{3}$ of the carton, Tommy always drinks $\frac{5}{12}$ of the carton, and Suzi always drinks $\frac{1}{6}$ of the carton.

What fraction of the carton of cat milk is left over? $\frac{1}{12}$

Show how you figured it out.

$\frac{1}{3} \cdot 4 = \frac{4}{12}$

$\frac{1}{6} \cdot 2 = \frac{2}{12}$

$\frac{4}{12} + \frac{2}{12} + \frac{5}{12} = \frac{11}{12}$

4. Cindy's cats love to jump in and out of their cat door.

Yesterday the cat door was used 100 times by her cats.

Sammy used it for $\frac{1}{4}$ of the times and Tommy used it for $\frac{3}{10}$ of the times.

How many times did Suzi use the cat door? 45 times

Explain how you figured it out.

$\frac{1}{4}$ of 100 is 25 $\frac{3}{10}$ of 100 is 30

25 + 30 = 55 100 - 55 = 45

Cindy's Cats

This problem gives you the chance to:
• solve fraction problems in a practical context

S6

Cindy has 3 cats: Sammy, Tommy and Suzi.

1. Cindy feeds them on Cat Crunchies.

   Each day Sammy eats $\frac{1}{2}$ of the box, Tommy eats $\frac{1}{8}$ of the box and Suzi eats $\frac{1}{4}$ of the box.

   What fraction of a whole box do the cats eat, in all, each day? $\frac{7}{8}$

   Show how you figured this out.

   $\frac{1}{2} = \frac{4}{8}$ $\frac{1}{8} = \frac{1}{8}$ $\frac{1}{4} = \frac{2}{8}$

   $\frac{4}{8} + \frac{1}{8} + \frac{2}{8} = \frac{7}{8}$

2. Tommy and Suzi spend much of each day sleeping.

   Tommy sleeps for $\frac{3}{5}$ of the day and Suzi sleeps for $\frac{7}{10}$ of the day.

   Which of the two cats sleeps for longer? Suzi

   How much longer does it sleep each day? $\frac{1}{10}$ of the day

   Show how you figured this out.

   Tommy Suzi
   $\frac{6}{10} - \frac{7}{10} = \frac{1}{10}$

3. Cindy's cats often share a carton of cat milk.

Sammy always drinks $\frac{1}{3}$ of the carton, Tommy always drinks $\frac{5}{12}$ of the carton, and Suzi always drinks $\frac{1}{6}$ of the carton.

What fraction of the carton of cat milk is left over? $\frac{1}{12}$

Show how you figured it out.

$\frac{4}{12} + \frac{5}{12} + \frac{2}{12} = \frac{11}{12}$

4. Cindy's cats love to jump in and out of their cat door.

Yesterday the cat door was used 100 times by her cats.

Sammy used it for $\frac{1}{4}$ of the times and Tommy used it for $\frac{3}{10}$ of the times.

How many times did Suzi use the cat door? $\frac{9}{10}$

Explain how you figured it out.

I made $\frac{1}{4} = \frac{25}{100}$ and $\frac{3}{10} = \frac{30}{100}$ then I added them up and subtract it from 100.

Cindy's Cats

This problem gives you the chance to:
- solve fraction problems in a practical context

S7

Cindy has 3 cats: Sammy, Tommy and Suzi.

1. Cindy feeds them on Cat Crunchies.

   Each day Sammy eats $\frac{1}{2}$ of the box, Tommy eats $\frac{1}{8}$ of the box and Suzi eats $\frac{1}{4}$ of the box.

   What fraction of a whole box do the cats eat, in all, each day? 87.5/100

   Show how you figured this out.

100/50 100/12.5 100/25

2. Tommy and Suzi spend much of each day sleeping.

   Tommy sleeps for $\frac{3}{5}$ of the day and Suzi sleeps for $\frac{7}{10}$ of the day.

   Which of the two cats sleeps for longer? Suzie

   How much longer does it sleep each day? 1/10

   Show how you figured this out.

3/5 ↓ 6/10 7/10

3. Cindy's cats often share a carton of cat milk.

Sammy always drinks $\frac{1}{3}$ of the carton, Tommy always drinks $\frac{5}{12}$ of the carton, and Suzi always drinks $\frac{1}{6}$ of the carton.

What fraction of the carton of cat milk is left over? 8.5/100

Show how you figured it out.

100/33.3 100/41.6 100/16.6

4. Cindy's cats love to jump in and out of their cat door.

Yesterday the cat door was used 100 times by her cats.

Sammy used it for $\frac{1}{4}$ of the times and Tommy used it for $\frac{3}{10}$ of the times.

How many times did Suzi use the cat door? 45 times

Explain how you figured it out.

I found the two fractions added them up and minused it out of one hundred.

5/25 7/30

Cindy's Cats

This problem gives you the chance to:
- solve fraction problems in a practical context

S8

Cindy has 3 cats: Sammy, Tommy and Suzi.

1. Cindy feeds them on Cat Crunchies.

   Each day Sammy eats $\frac{1}{2}$ of the box, Tommy eats $\frac{1}{8}$ of the box and Suzi eats $\frac{1}{4}$ of the box.

   What fraction of a whole box do the cats eat, in all, each day? They eat all of it.

   Show how you figured this out.

   $\frac{+4}{2\times4=8}$ $\frac{1}{8}$ $\frac{+2}{4\times2=8}$

2. Tommy and Suzi spend much of each day sleeping.

   Tommy sleeps for $\frac{3}{5}$ of the day and Suzi sleeps for $\frac{7}{10}$ of the day.

   Which of the two cats sleeps for longer? Suzi

   How much longer does it sleep each day? By $\frac{1}{10}$

   Show how you figured this out. Compare

   $\frac{+6}{5\times2=10}$ $\frac{7}{10}$

   $\frac{6}{10}$ $\left(\frac{7}{10}\right)$ → Suzi

3. Cindy's cats often share a carton of cat milk.

Sammy always drinks $\frac{+4}{3 \times 4 = 12}$ of the carton, Tommy always drinks $\frac{5}{12}$ of the carton, and Suzi always drinks $\frac{+2}{6+2=12}$ of the carton.

What fraction of the carton of cat milk is left over? $\frac{1}{12}$

Show how you figured it out.

$\frac{4}{12} + \frac{2}{12} + \frac{5}{12} = \frac{11}{12}$ $\quad 12 - 11 = \frac{1}{2}$

4. Cindy's cats love to jump in and out of their cat door.

Yesterday the cat door was used 100 times by her cats.

Sammy used it for $\frac{+5}{4 \times 5 = 20}$ of the times and Tommy used it for $\frac{3\ 6}{10\ 20}$ of the times.

$\frac{11}{20}$ $20 - 11 = 9$

How many times did Suzi use the cat door? She used it $\frac{9}{20}$ times.

Explain how you figured it out.

I turned Sammy's time to both of their L.C.M, doing the bottom and top, and added $\frac{5}{20}$ and $\frac{6}{20}$ up (their time) and got 11/20, and $20 - 11 = 9$, so $\frac{9}{20}$ is Suzi.

Cindy's Cats

This problem gives you the chance to:
- solve fraction problems in a practical context

S9

Cindy has 3 cats: Sammy, Tommy and Suzi.

1. Cindy feeds them on Cat Crunchies.

   Each day Sammy eats $\frac{1}{2}$ of the box, Tommy eats $\frac{1}{8}$ of the box and Suzi eats $\frac{1}{4}$ of the box.

   What fraction of a whole box do the cats eat, in all, each day? 7/8

   Show how you figured this out.

   1/2 1/4 4/8

   4/8 + 1/8 + 2/8 = 7/8

   1/4 → 2/8

2. Tommy and Suzi spend much of each day sleeping.

   Tommy sleeps for $\frac{3}{5}$ of the day and Suzi sleeps for $\frac{7}{10}$ of the day.

   Which of the two cats sleeps for longer? Suzi

   How much longer does it sleep each day? by 1/10

   Show how you figured this out.

   6/10 7/10

   convert & compare

3. Cindy's cats often share a carton of cat milk.

Sammy always drinks $\frac{1}{3}$ of the carton, Tommy always drinks $\frac{5}{12}$ of the carton, and Suzi always drinks $\frac{1}{6}$ of the carton.

What fraction of the carton of cat milk is left over? 1/12

Show how you figured it out.

1/3 1/6
4/12 + 2/12 + 5/12 = 11/12

12/12 - 11/12 = 1/12

4. Cindy's cats love to jump in and out of their cat door.

Yesterday the cat door was used ~~400~~ times by her cats.

Sammy used it for $\frac{1}{4}$ of the times and Tommy used it for $\frac{3}{10}$ of the times.

How many times did Suzi use the cat door? 45 times

Explain how you figured it out.

I change 1/4 into a similar fraction, the 100ths and I added how many times Sammy & Tommy used the cat door and subtracted that from 100 & then I got how many times Suzi used the cat door.

25/100 30/100

25 + 30 = 55

100 - 55 = 45

Cindy's Cats

This problem gives you the chance to:
- solve fraction problems in a practical context

S10

Cindy has 3 cats: Sammy, Tommy and Suzi.

1. Cindy feeds them on Cat Crunchies.

   Each day Sammy eats $\frac{1}{2}$ of the box, Tommy eats $\frac{1}{8}$ of the box and Suzi eats $\frac{1}{4}$ of the box.

   What fraction of a whole box do the cats eat, in all, each day? $\frac{7}{8}$

   Show how you figured this out.

$\frac{1}{2} = \frac{4}{8}$ $\frac{1}{4} = \frac{2}{8}$

$\frac{4}{8} + \frac{2}{8} + \frac{1}{8} = \frac{7}{8}$

2. Tommy and Suzi spend much of each day sleeping.

   Tommy sleeps for $\frac{3}{5}$ of the day and Suzi sleeps for $\frac{7}{10}$ of the day.

   Which of the two cats sleeps for longer? Suzi

   How much longer does it sleep each day? Suzi sleeps $\frac{1}{10}$ of the day longer

   Show how you figured this out.

$\frac{3}{5} = \frac{6}{10}$ $\frac{6}{10} < \frac{7}{10}$ $\frac{7}{10} - \frac{6}{10}$

$\frac{1}{10}$

3. Cindy's cats often share a carton of cat milk.

Sammy always drinks $\frac{1}{3}$ of the carton, Tommy always drinks $\frac{5}{12}$ of the carton, and Suzi always drinks $\frac{1}{6}$ of the carton.

What fraction of the carton of cat milk is left over? $\frac{3}{12}$ of the carton

Show how you figured it out.

$\frac{1}{3} = \frac{4}{12}$ $\frac{1}{6} = \frac{2}{12}$ $\frac{12}{12} - \frac{9}{12} = \frac{3}{12}$

$\frac{4}{12} + \frac{2}{12} + \frac{5}{12} = \frac{9}{12}$

4. Cindy's cats love to jump in and out of their cat door.

Yesterday the cat door was used 100 times by her cats.

Sammy used it for $\frac{1}{4}$ of the times and Tommy used it for $\frac{3}{10}$ of the times.

How many times did Suzi use the cat door? 45 times

Explain how you figured it out.

I made all the fractions equal. Then I add them up. The I did $\frac{100}{100} - \frac{55}{100} = \frac{45}{100}$ and got my answer.

$\frac{1}{4} = \frac{5}{20}$ $\frac{3}{10} = \frac{6}{20}$ $\frac{3}{10} = \frac{30}{100}$ $\frac{1}{4} = \frac{25}{10}$

5+6 11
20 9

8