Math Live – *Addition and Subtraction of Decimals*: Activity Sheet

Grade: 4   **Strand**: Number   **Outcome:** 11

1. You have $3.20 and spend $1.89 on a burger.

   a. About how much money do you have left? Show the numbers you used to find the answer in your head.

   b. Calculate, using paper and pencil, how much money you have left. Draw diagrams to show that your answer is correct.

2. A book costs $4.98. You have $1.89.

   a. About how much more money do you need to buy this book? Show the numbers you used to find the answer in your head.

   b. Calculate, using paper and pencil, how much more money you need to buy this book. Draw diagrams to show that your answer is correct.

3. You have 3.4 m of ribbon. After you cut off some ribbon, you have 1.52 m left.

   a. About how many metres of ribbon did you cut off? Show the numbers you used to find the answer in your head.

   b. Calculate, using paper and pencil, how many metres of ribbon you cut off. Draw diagrams to show that your answer is correct.

4. Lori and her cat weigh 40.9 kg. Lori weighs 37.16 kg.

   a. Estimate the weight of Lori's cat. Show the numbers you used to find the answer in your head.

   b. Calculate, using paper and pencil, how many kilograms Lori's cat weighs. Check your answer by using addition.

5. You jog for 10.05 hours one week and 7.2 hours the next week.

    a. About how many more hours did you jog in the first week than in the second week? Show the numbers you used to find the answer in your head.

    b. Calculate, using paper and pencil, how many more hours you jogged in the first week than in the second week. Explain how you know your answer is correct.

6. $180.4 - 90.59 = ?$

    a. Estimate first, then calculate your answer. Show all your work.

7. $750.02 - 498.76 = ?$
    a. Estimate first, then calculate your answer. Show all your work.

8. Create a problem that could be solved by subtracting decimals.

9. Create a problem that could be solved by adding decimals.

1. You have $3.20 and spend $1.89 on a burger.
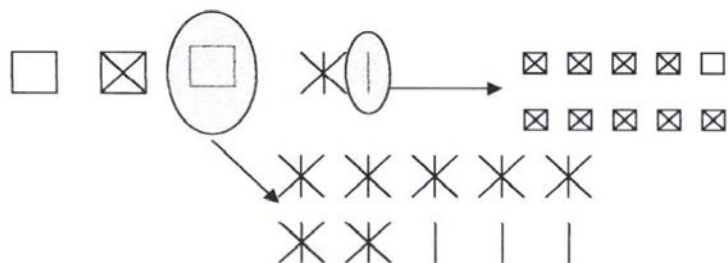   a. About how much money do you have left? Show the numbers you used to find the answer in your head.

   $$3.20 \longrightarrow 3$$
   $$1.89 \longrightarrow \underline{-2}$$
   $$\ 1$$

   I have about $1 left.

   b. Calculate, using paper-and-pencil, how much money you have left. Draw diagrams to show that your answer is correct.

   □ ⟶ One whole | ⟶ one tenth   ☐ ⟶ one hundredth

   $$\begin{array}{r} {}^{2}\cancel{3}.{}^{11}\cancel{2}\,{}^{10}\cancel{0} \\ 1.\,8\,9 \\ \hline 1.\,3\,1 \end{array}$$
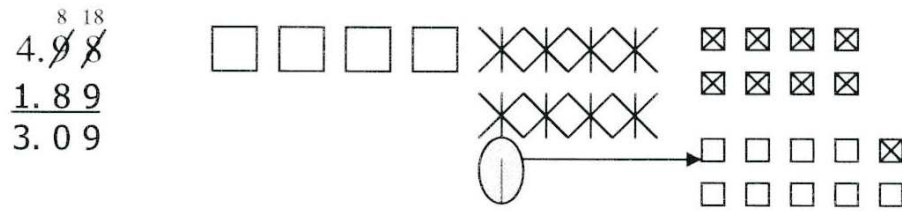
   I have $1.31 left.

2. A book costs $4.98. You have $1.89.
   a. About how much more money do you need to buy this book? Show the numbers you used to find the answer in your head.

   $$4.98 \longrightarrow 5$$
   $$1.89 \longrightarrow \underline{-2}$$
 $$\ 3$$

   I need about $3 more to buy this book.

b. Calculate, using paper-and-pencil, how much more money you need to buy this book. Draw diagrams to show that your answer is correct.

$$\begin{array}{r} \overset{8}{\cancel{9}}\overset{18}{\cancel{8}} \\ 4.\cancel{9}\,\cancel{8} \\ \underline{1.\,8\,9} \\ 3.\,0\,9 \end{array}$$

I need $3.09 more to buy this book.

3. You have 3.4 m of ribbon. After you cut off some ribbon, you have 1.52 m left.
   a. About how many metres of ribbon did you cut off? Show the numbers you used to find the answer in your head.

$$\begin{array}{r} 3.4 \longrightarrow 3 \\ \underline{1.89 \longrightarrow -1} \\ 2 \end{array}$$
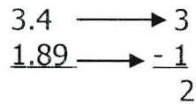
I have about 2 m of ribbon left.

b. Calculate, using paper-and-pencil, how many metres of ribbon you cut off. Draw diagrams to show that your answer is correct.

$$\begin{array}{r} \overset{2}{\cancel{3}}.\overset{13}{\cancel{4}}\overset{10}{\cancel{0}} \\ \underline{1.\,5\,2} \\ 1.\,8\,8 \end{array}$$
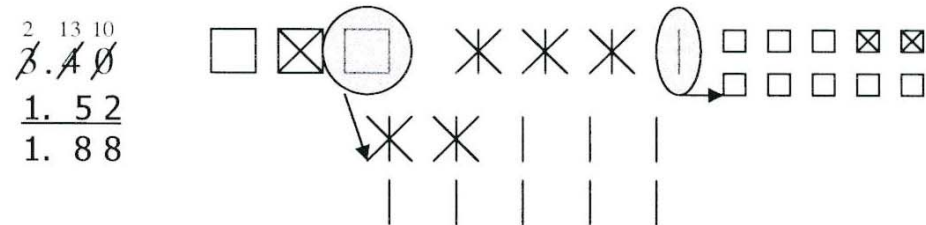
I have 1.88 m of ribbon left.

4. Lori and her cat weigh 40.9 kg. Lori weighs 37.16 kg.
   a. Estimate the weight of Lori's cat. Show the numbers you used to find the answer in your head.

   40.9 $\longrightarrow$ 41
   37.16 $\longrightarrow$ - 37
   _____
   4

   Lori's cat weighs about 4 kg.

   b. Calculate, using paper-and-pencil, how many kilograms Lori's cat weighs. Check your answer by using addition.

   $$\overset{3\quad 10\quad 8\quad 10}{\cancel{4}\,\cancel{0}.\cancel{9}\,\cancel{0}}$$
   3 7. 1 6
   _____
   3 .7 4

   Check using addition

   $$\overset{1\quad\quad 1}{37.16}$$
   + 3.74
   _____
   40.90

   Lori's cat weighs 3.74 kg.

5. You jog for 10.05 hours one week and 7.2 hours the next week.
   a. About how many more hours do the jog the first week than the second week? Show the numbers you used to find the answer in your head.

   10.05 $\longrightarrow$ 10
   7.2 $\longrightarrow$ - 7
   _____
   3

   I jogged about 3 hours longer the first week than the second week.

   b. Calculate, using paper-and-pencil, how many more hours you jogged the first week than the second week. Explain how you know your answer is correct.

   $$\overset{0\quad 9\quad 10}{\cancel{1}\,\cancel{0}.\cancel{0}\,5}$$
   7. 2 0
   _____
   2. 8 5

   Check using addition

   $$\overset{1}{7.20}$$
   2.85
   _____
   10.05

   I jogged 2.65 hours longer the first week than the second week.

6. 180.4 − 90.59 =

Estimate first, then calculate your answer. Show all your work.

Estimation

180.4 ⟶ 180
 90.59 ⟶ − 90
                90

The estimated difference is about 90.

Calculation	Check using addition
0 17 19 13 0	1 1 1
$\cancel{1}\cancel{8}\cancel{0}.\cancel{4}\cancel{0}$	90.59
− 9 0 . 5 9	+ 89.81
8 9 . 8 1	180.40

The calculated difference is 89.81.

7. 750.02 − 498.76 =

Estimate first, then calculate your answer. Show all your work.

Estimation

750.02 ⟶ 750
498.76 ⟶ − 500
                 250

The estimated difference is about 250.

Calculation	Check using addition
6 14 9 9 2	1 1 1 1
$\cancel{7}\cancel{5}\cancel{0}.\cancel{0}\cancel{2}$	498.76
− 4 9 8 . 7 6	+251.26
2 5 1 . 2 6	750.02

The calculated difference is 251.26.

8. Create a problem that could be solved by subtracting decimals.

   Example: Susie runs 7.8 km in the same time that Brandon runs 6.89 km. Susie runs how many kilometres more than Brandon during that time? Estimate your answer first.

9. Create a problem that could be solved by adding decimals.

   Mary spent $14.98 on a CD and had $10.02 left. How much money did Mary have before she bought this CD? Estimate your answer first.