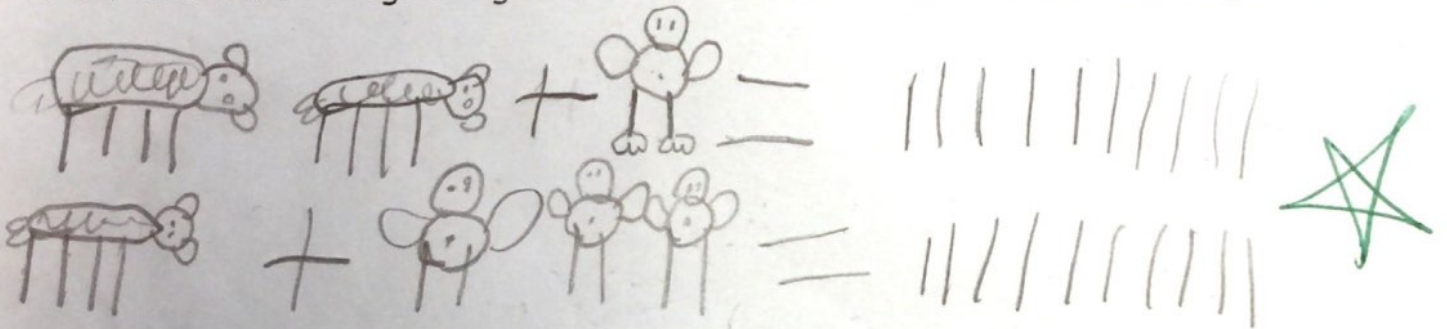


Grades 1-2 March MATH CHALLENGE

Your challenge is to use your problem solving skills to solve these two problems. There are **MANY** ways to work on these. Be sure to show your thinking using pictures, number, and/or words. Due: March 28, 2017

If a new neighbor moves in with pet dogs and birds, how many animals can there be if there are 10 legs altogether? Is there more than one answer? Explain.



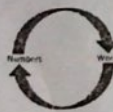
My neighbor has either three animals or four animals.

This is a fantastic example of a clear explanation and a precise answer!

Which **MATH PRACTICES** did you use to solve this problem? Circle all that apply.



I can make a plan and use my plan to solve the problem without giving up.



I can use numbers and words to help me make sense of problems.



I can explain my thinking and try to understand others.



I can recognize math in everyday life and use math I know to solve problems.



I can use math tools and tell why I chose them!



I can work carefully and be clear when I share my ideas. I can check my work.



I can see and understand how numbers and shapes are put together as parts and wholes.



I can create shortcuts and generalizations and reflect on the reasonableness of my answers.

Work samples from past months' challenges can be found at <http://foselementarymath.wikispaces.com>


Place eight quarters in a row. Replace every other coin with a dime. Replace every third coin with a nickel. Finally, replace every fourth coin with a penny. What is the value of the eight coins now? How much more or less money do you have than when you started? Were any coins not replaced? Show your work.


Such clear, precise work!  


\$1.03 less than we started


Columns 1, 5 and 7 did not change.


Which **MATH PRACTICES** did you use to solve this problem? Circle all that apply.


 I can make a plan and use my plan to solve the problem without giving up.


 I can use numbers and words to help me make sense of problems.


 I can explain my thinking and try to understand others.

 I can recognize math in everyday life and use math I know to solve problems.

 I can use math tools and tell why I chose them!

 I can work carefully and be clear when I share my ideas. I can check my work.

 I can see and understand how numbers and shapes are put together as parts and wholes.

 I can create shortcuts and generalizations and reflect on the reasonableness of my answers.

Work samples from past months' challenges can be found at <http://fpselementarymath.wikispaces.com>

GRADES 3-4 March MATH CHALLENGE

Your challenge is to use your problem solving skills to solve these two problems. There are *MANY* ways to work on these. Be sure to show your thinking using pictures, number, and/or words. Due: March 28, 2017

A rectangular living room measures 12 feet by 10 feet. A carpet placed on the floor leaves a border 2 feet wide all around it. What is the area of the border? Show your work with a drawing.

$2\text{ft} \times 10\text{ft} = 20\text{ft}$
 $2\text{ft} \times 10\text{ft} = 20\text{ft}$
 $2\text{ft} \times 8\text{ft} = 16\text{ft}$
 $2\text{ft} \times 8\text{ft} = 16\text{ft}$
72ft
 Yes! Nice Job!

72 ft²

Which **MATH PRACTICES** did you use to solve this problem? Circle all that apply.

- I can make a plan and use my plan to solve the problem without giving up.
- I can use numbers and words to help me make sense of problems.
- I can explain my thinking and try to understand others.
- I can recognize math in everyday life and use math I know to solve problems.
- I can use math tools and tell why I chose them!
- I can work carefully and be clear when I share my ideas. I can check my work.
- I can see and understand how numbers and shapes are put together as parts and wholes.
- I can create shortcuts and generalizations and reflect on the reasonableness of my answers.

Work samples from past months' challenges can be found at <http://fpselementarymath.wikispaces.com>

This is a riddle. Take your time to think this out!


If 3 people can build 3 snow forts in 3 hours, how long does it take 1 person to build 1 snow fort?




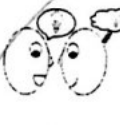
$$1 \text{ person} = 1 \text{ snow fort} = 3 \text{ hours}$$


It took each person 3 hrs. to build one snow fort.


Which MATH PRACTICES did you use to solve this problem? Circle all that apply.


 I can make a plan and use my plan to solve the problem without giving up.

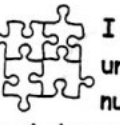
 I can use numbers and words to help me make sense of problems.


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 I can use math tools and tell why I chose them!

 I can work carefully and be clear when I share my ideas. I can check my work.

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Work samples from past months' challenges can be found at <http://fpselementarymath.wikispaces.com>