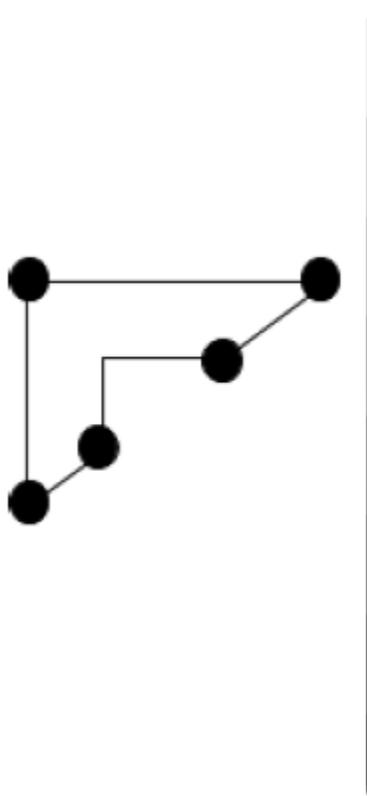


Early Elementary Winter Quarter Review Problems

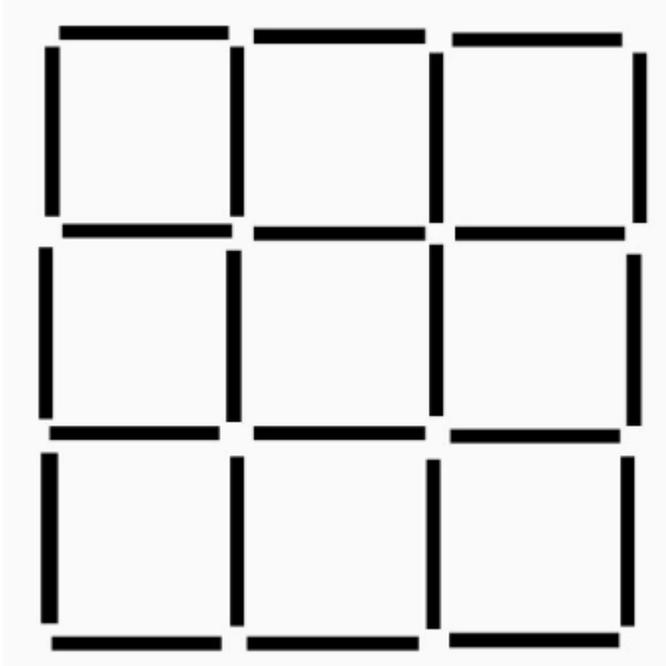
March 11th, 2018

Math with Sticks

1. Draw the reflection of the figure.



2. Remove 6 sticks so that 5 squares (and nothing else) are left. Cross out the sticks which you removed. Draw your new shape below.



3. Move the Sticks:

• $IV + V = XI$

• $XV + I = XIV$

• $XIII + V = XI$

• $III + III = IV$

• $V + VI = IX$

. Probability Experiment:

1. Remember the Probability Experiment? Fill in the chart for the sums resulting from rolls two 6 sided die.

2.....	3.....	4.....	5.....	6.....	7.....	8.....	9.....	10.....	11.....	12.....
1+	1+2	1+3	1+4	1+5	1+6	2+6	3+6	4+6	5+6	6+6

2. What sum are we most likely to get as the sum of the two numbers on the dice?

- How do you know?

3. Are we more likely to get a sum greater than 9 or less than 7?

- How do you know?

The Island of Knights and Liars:

1. Who can say “I am a Knight”?

2. Who can say “I am a Liar”?

3. Who can say “I am a Tourist”?

4. The Island of Knights and Liars is full of Knights, Liars, and Tourists.
Figure out who everyone is by what they say!

- Kate: “I am a Liar.”
- Stephen: “Kate is not a Liar”
- Rebecca: “Stephen and I are both Liars.”
- Thomas: “Rebecca is a Knight.”

– Can you tell who everyone is? Explain how you know.

– Kate:

– Stephen:

– Rebecca:

– Thomas:

5. On Copper's birthday, she wants to share her balloons with all of her family members. She gives a third of her balloons to her sister. Then, she gives a third of her balloons that she has left to her Mom. Then she gives a third of the balloons she has left to her Dad. After all of that, she has 8 balloons left. How many balloons did she start with on her birthday?
6. Chynna is trying to get to her grandma's house. However, in order to get to her Grandma's house, she has to pay the trolls that live under the bridges a toll. Luckily, every time she crosses a bridge her money doubles. She must pay the troll 12 coins first, before she crosses a bridge. Chynna is going to make it! She has just enough money to get from her house to her grandma's house. This means when she arrives at her grandma's house, she will have zero coins left. If her grandma's house is three bridges away, how many coins does Chynna start with? Hint: Draw a picture! It helps!

How to Fight a Dragon:

- Reminder of the Dragon Rules:

- If you cut off 1 Head, then 2 Heads immediately grow instead
- If you cut off 2 Heads, nothing grows back
- If you cut off 1 Tail, then 2 Tails immediately grow back
- If you cut off 2 Tails, then 1 Head immediately grows back

1. Defeat these dragons in as FEW MOVES as possible.

- (3,2)

- (5,7)

- (8,2)

- (1,5)

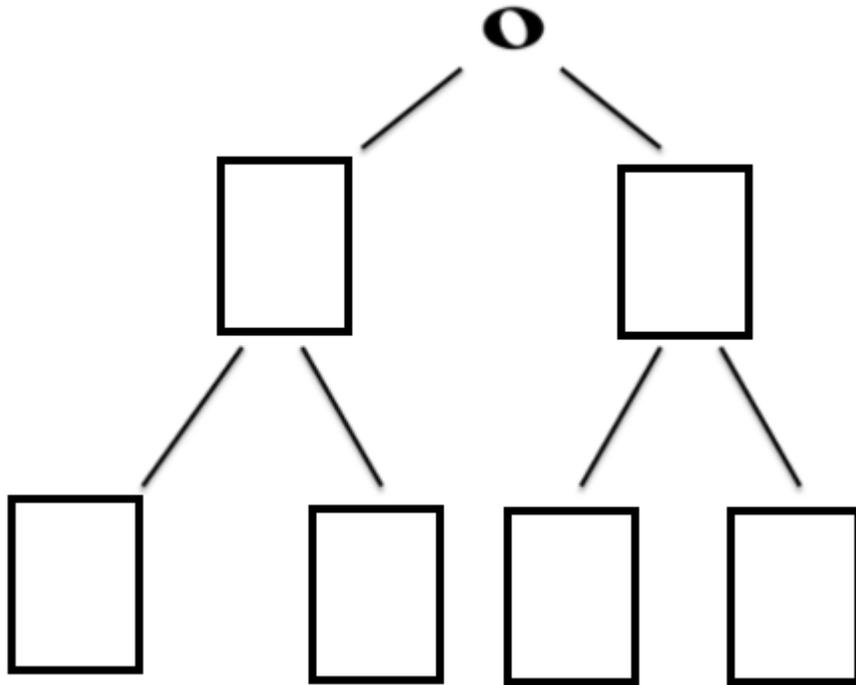
2. Explain how you defeat a dragon with an odd number of heads and 2 tails.

Counting Beats:

1. Name these notes and the number of beats they have.



2. Fill in the Chart with the correct notes

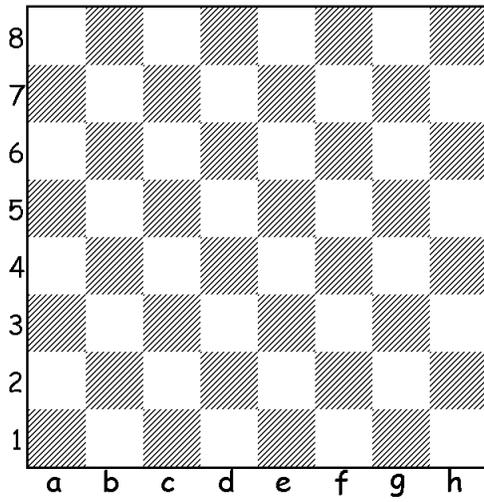


3. Create 4 of your own problems with at least 3 notes on one side of the equal sign. For example:

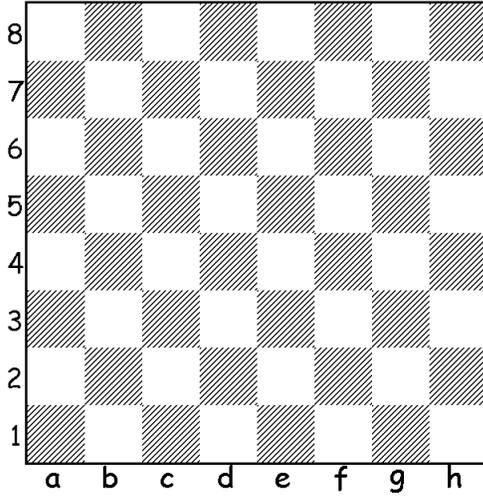


Extra Problems:

1. Shade in the squares, c2, d4, h2, g7 on the chessboard.



2. Shade in squares to create the letter H.



- What squares did you shade in?

Homework: Math Kangaroo Problems:

1. The doctor gave a certain medicine to Ada. He gave her 60 pills, and told her to take one pill each day. Ada began taking the pills on a Monday. What day of the week will it be when she takes the last pill?
 - (a) Monday
 - (b) Tuesday
 - (c) Wednesday
 - (d) Thursday
2. Right now, John is 4 years old, and his father is 26 years old. How old will John's father be when John is 3 times as old as he is now?
 - (a) 78
 - (b) 38
 - (c) 42
 - (d) 34
3. Eva bought 2 identical notebooks. She had \$4 left over. If she wanted to buy two more notebooks like these, she would need \$2 more than she started with. How much did one notebook cost?
 - (a) \$2
 - (b) \$10
 - (c) \$6
 - (d) \$3
4. Sharon had 10 dolls. She gave one of her dolls. How many dolls does Sharon have now?
 - (a) 6
 - (b) 7
 - (c) 8
 - (d) 9

5. There are 2 boys and 2 dogs and nobody else on the playground. How many legs are there on this playground?
- (a) 12
 - (b) 10
 - (c) 8
 - (d) 4
6. At the end of the skiing season, there were 12 pairs of ski boots left at the store. How many ski boots counted one-by-one were left at the store?
- (a) 6
 - (b) 12
 - (c) 24
 - (d) 4
7. In 36 years, Mark's grandmother will celebrate her 100th birthday. How old is Mark's grandmother now?
- (a) 74
 - (b) 64
 - (c) 66
 - (d) 36
8. The flowers in the flower shop were kept in three cases. There were 16 flowers in the first vase, 11 flowers in the second vase and 17 flowers in the third vase. The owner decided to sell only bouquets of 5 flowers each. After selling some bouquets, she noticed that she did not have enough flowers to make another bouquet. How many flowers did she have left?
- (a) 1
 - (b) 2
 - (c) 3
 - (d) 4