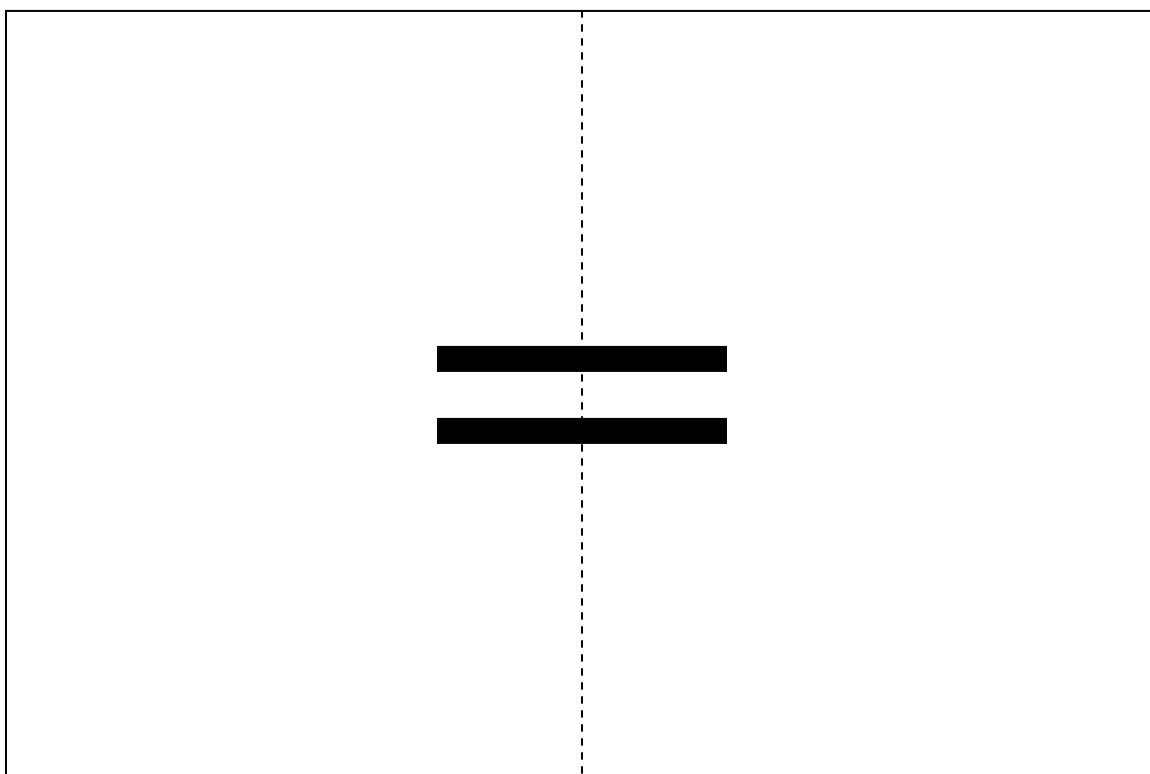
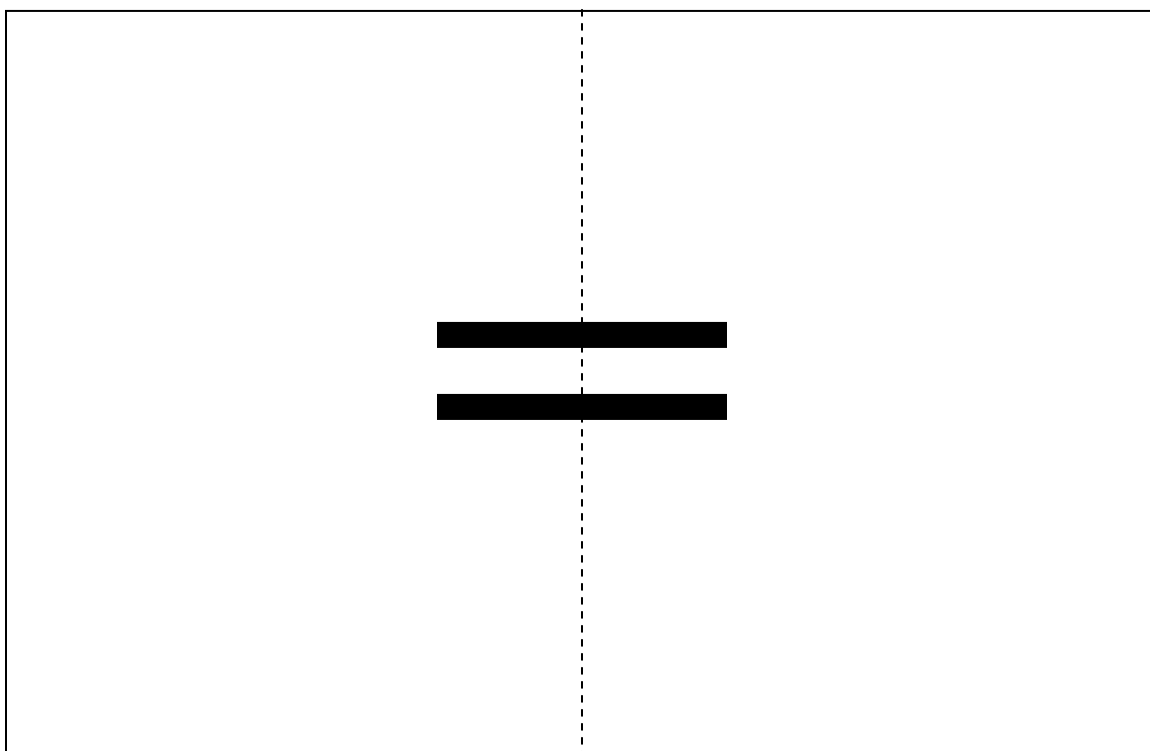


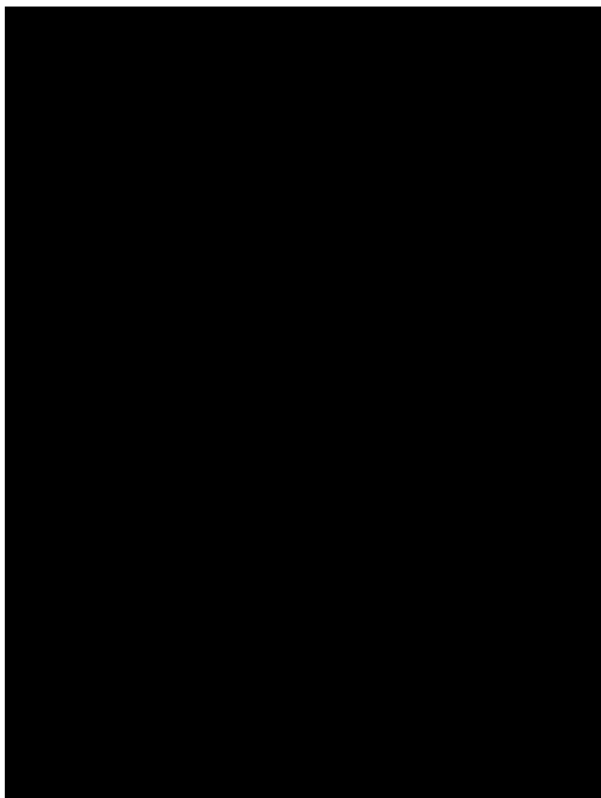
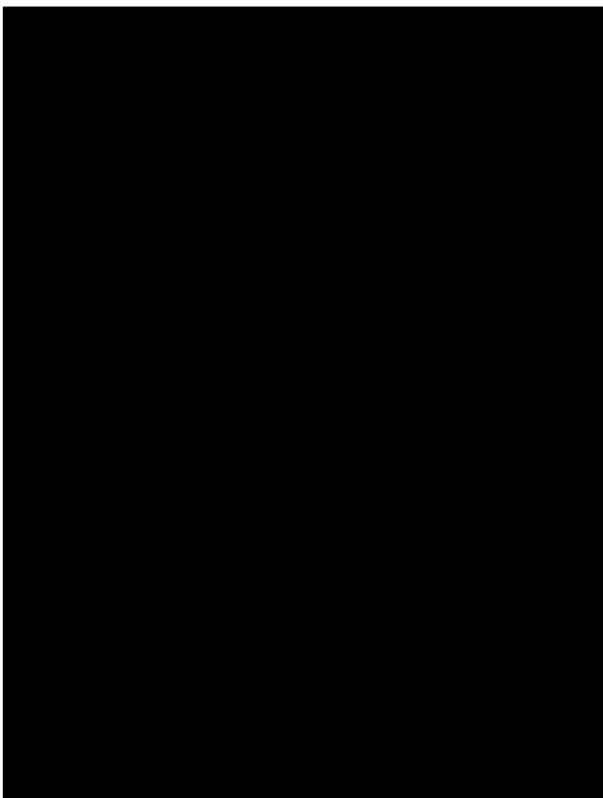
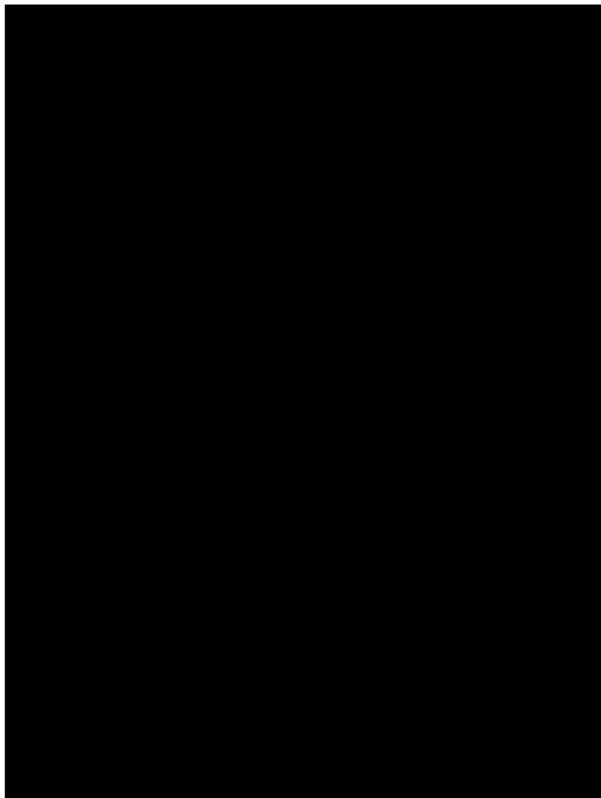
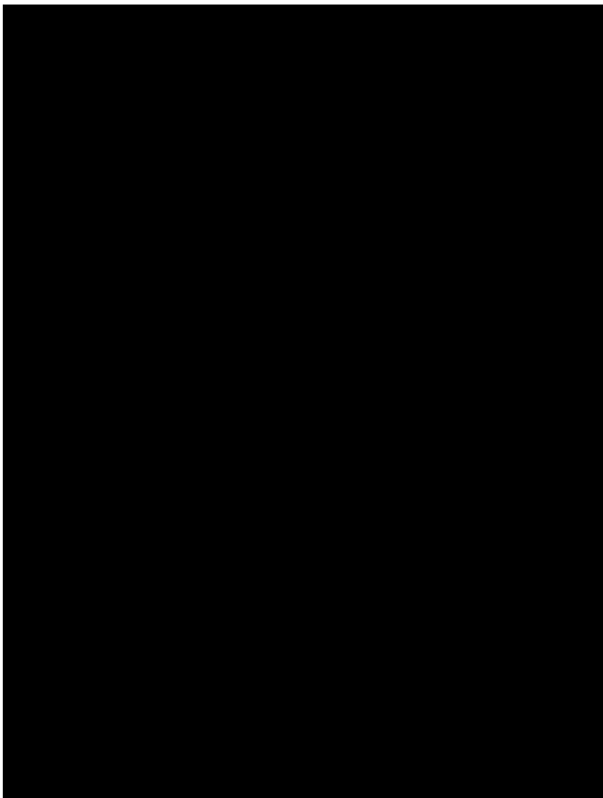
Unit 4, Activity 4, Equation Mats

Name: _____

Date: _____



Unit 4, Activity 5, Black Card



Unit 4, Activity 6, Multi-Step Questioning the Content

| | | |
|--------------------------------------|---|--|
| Initiate discussion | What is the problem about? | |
| | What is the question asking? What do you need to find? | |
| Focus on the content's message | How would you draw a picture of the problem? | |
| | What operation(s) would you use to solve this problem? | |
| | What parts of the content told you to use those operations? | |
| | What would be the equation for this problem? | |
| Link information | What would this problem look like with base-10 blocks? | |
| Identify problems with understanding | How would you solve the problem? | |
| | If dividing, what do you do with the remainder? How do you know what to do? | |
| | How do you know you are correct? | |
| | How would you answer the question using words? | |

Unit 4, Activity 8, Growing Patterns

| | | |
|----------------------|--|--|
| Initiate discussion | What are the changes from number to number? | |
| Focus on the content | Are the changes from number to number the same or different? | |
| | What operation(s) is being used? | |
| Link information | Do the changes from number to number have any patterns? | |
| | What number would extend the pattern? | |
| Identify problems | Is the change from your extended number to the last number the same as the previous changes? | |
| | Does the pattern make sense? | |
| | How can you explain the pattern clearly? | |

Unit 4, Activity 9, Explain the Rule

Name: _____

Date: _____

Complete these tables and state the rule for the next number in the pattern.

| | | | | | | |
|----------|----------|-----------|-----------|--|--|--|
| 2 | 7 | 12 | 17 | | | |
|----------|----------|-----------|-----------|--|--|--|

Rule: _____

| | | | | | | |
|-----------|-----------|-----------|-----------|--|--|--|
| 78 | 74 | 70 | 66 | | | |
|-----------|-----------|-----------|-----------|--|--|--|

Rule: _____

| | | | | | | |
|-----------|-----------|-----------|-----------|--|--|--|
| 12 | 24 | 48 | 96 | | | |
|-----------|-----------|-----------|-----------|--|--|--|

Rule: _____

CHALLENGE

| | | | | | | |
|---------------|---------------|--------------|------------|--|--|--|
| 62,500 | 12,500 | 2,500 | 500 | | | |
|---------------|---------------|--------------|------------|--|--|--|

Rule: _____

A. If the numbers in the pattern increase, what operations have been used?

B. If the numbers in the pattern decrease, what operations have been used?

Unit 4, Activity 9, Explain the Rule with Answers

Name: _____

Date: _____

Complete these tables and state the rule for the next number in the sequence.

| | | | | | | |
|----------|----------|-----------|-----------|-----------|-----------|-----------|
| 2 | 7 | 12 | 17 | 22 | 27 | 32 |
|----------|----------|-----------|-----------|-----------|-----------|-----------|

Rule: Add 5 ($2 + n = 7$ $n = 5$)

| | | | | | | |
|-----------|-----------|-----------|-----------|-----------|-----------|-----------|
| 78 | 74 | 70 | 66 | 62 | 58 | 54 |
|-----------|-----------|-----------|-----------|-----------|-----------|-----------|

Rule: Subtract 4 ($78 - n = 74$ $n = 4$)

| | | | | | | |
|-----------|-----------|-----------|-----------|------------|------------|------------|
| 12 | 24 | 48 | 96 | 192 | 384 | 768 |
|-----------|-----------|-----------|-----------|------------|------------|------------|

Rule: Multiply by 2 ($12 \times n = 24$ $n = 2$)

CHALLENGE

| | | | | | | |
|---------------|---------------|-------------|------------|------------|-----------|----------|
| 62,500 | 12,500 | 2500 | 500 | 100 | 20 | 4 |
|---------------|---------------|-------------|------------|------------|-----------|----------|

Rule: Divide by 5 ($62,500 \div n = 12,500$ $n = 5$)

A. If the numbers in the pattern increase, what operations have been used?

Addition or Multiplication

B. If the numbers in the pattern decrease, what operations have been used?

Subtraction or Division