



**NEW ENGLAND  
COMMON ASSESSMENT PROGRAM**

**Student Work Samples  
2011**

**Grade 4**



# Mathematics



- 11 Mrs. Perez bought 3 boxes of garbage bags. Each box has 12 garbage bags. She used 2 garbage bags. How many garbage bags does Mrs. Perez have left?

$$\begin{array}{r} 3 \\ \times 12 \\ \hline 36 \\ - 2 \\ \hline \textcircled{34} \end{array}$$

34 garbage bags



- 11 Mrs. Perez bought 3 boxes of garbage bags. Each box has 12 garbage bags. She used 2 garbage bags. How many garbage bags does Mrs. Perez have left?

34 bags



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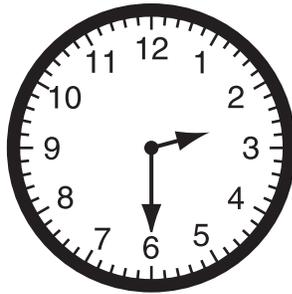
36 bags



12 These clocks show the time art class starts and the time art class ends.



Start time



End time

How long, in minutes, is art class?

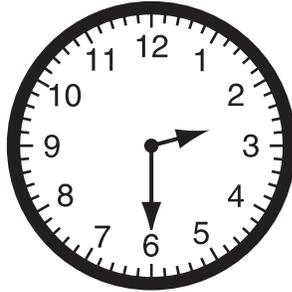
45 minutes



12 These clocks show the time art class starts and the time art class ends.



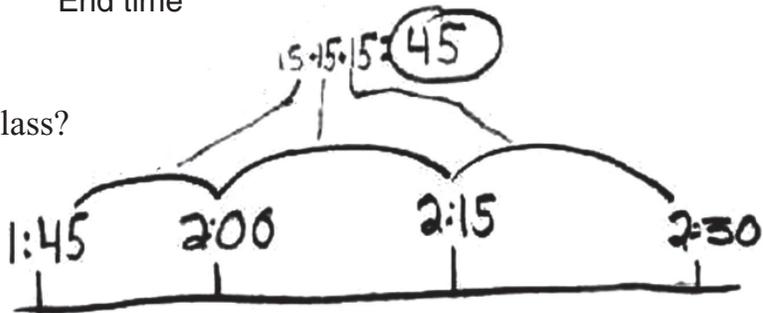
Start time



End time

How long, in minutes, is art class?

45 minutes

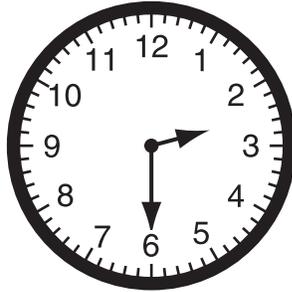




12 These clocks show the time art class starts and the time art class ends.



Start time



End time

How long, in minutes, is art class?

2:30 minutes

- 13 A class voted to choose **two** flavors of ice cream to have at a party. This chart shows the number of votes each flavor of ice cream received.

### Ice-Cream Party

Flavor	Number of Votes
Chocolate	8
Vanilla	5
Strawberry	2
Peanut Butter	4
Fudge Swirl	5

Explain whether the class should vote again.

The class should vote again because Fudge Swirl and Vanilla got the same amount of votes

- 13 A class voted to choose **two** flavors of ice cream to have at a party. This chart shows the number of votes each flavor of ice cream received.

### Ice-Cream Party

Flavor	Number of Votes
Chocolate	8
Vanilla	5
Strawberry	2
Peanut Butter	4
Fudge Swirl	5

Explain whether the class should vote again.

The class should not vote again because my favorite kind of ice cream is chocolate.

- 13 A class voted to choose **two** flavors of ice cream to have at a party. This chart shows the number of votes each flavor of ice cream received.

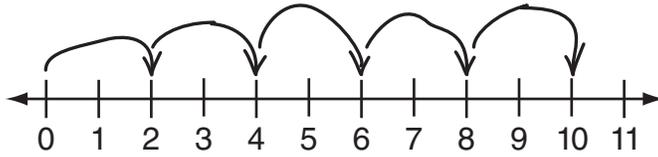
### Ice-Cream Party

Flavor	Number of Votes
Chocolate	8
Vanilla	5
Strawberry	2
Peanut Butter	4
Fudge Swirl	5

Explain whether the class should vote again. *The class should vote again because they might change their mind.*



14 Jamie counted paper clips in groups of 2. He used this number line to show his work.



a. Write an addition sentence Jamie could use to show his work.

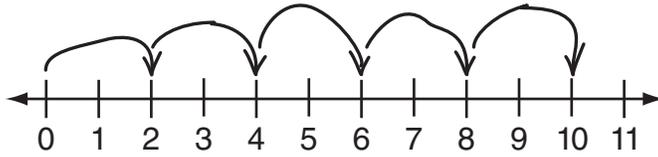
$$2 + 2 + 2 + 2 + 2 = 10$$

b. Write a multiplication sentence Jamie could use to show his work.

$$2 \times 5 = 10$$



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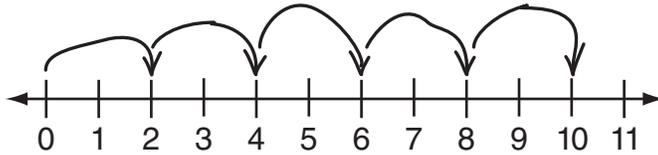
$$\begin{array}{r} 0 \\ + 0 \\ \hline 10 \end{array}$$

b. Write a multiplication sentence Jamie could use to show his work.

$$\begin{array}{r} \times 5 \\ 2 \\ \hline 10 \end{array}$$



- 14 Jamie counted paper clips in groups of 2. He used this number line to show his work.



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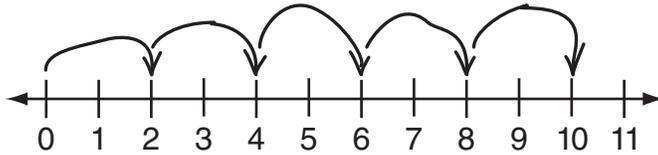
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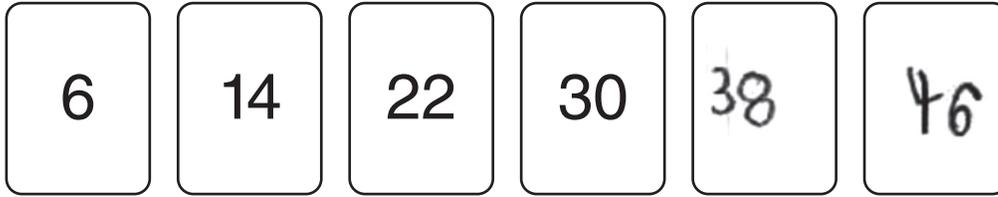
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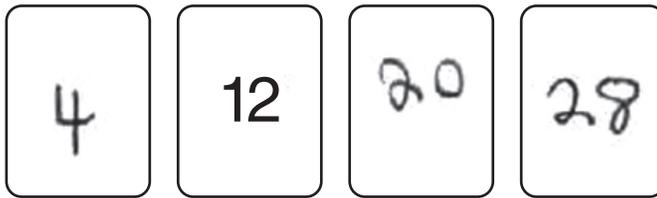
$$\begin{array}{r} 2+2+2+2+2=10 \\ \vee \quad \vee \quad | \\ 4+4+2=10 \end{array}$$

- 15 Jerome used number cards to make this number pattern.



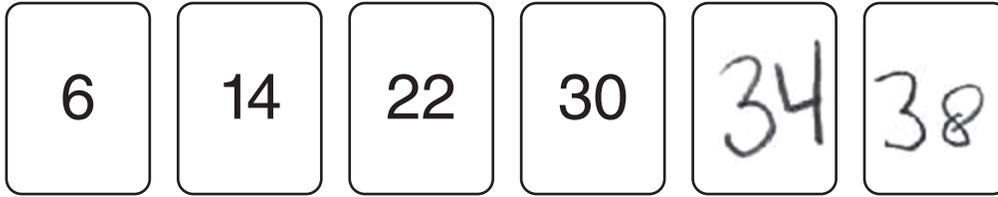
- a. On the cards, write the next two numbers in Jerome's pattern.

Katherine uses the same rule as Jerome to make a new pattern. One number in Katherine's pattern is shown on these cards.



- b. On the cards, write the missing numbers in Katherine's pattern.

15 Jerome used number cards to make this number pattern.



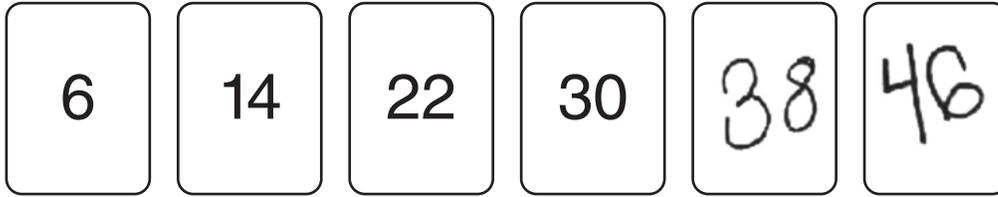
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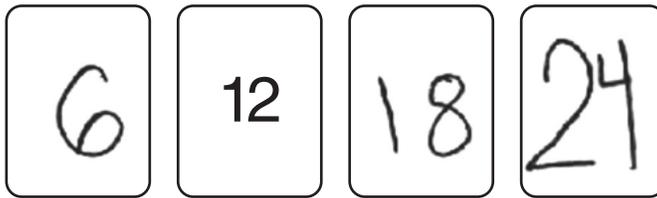
b. On the cards, write the missing numbers in Katherine's pattern.

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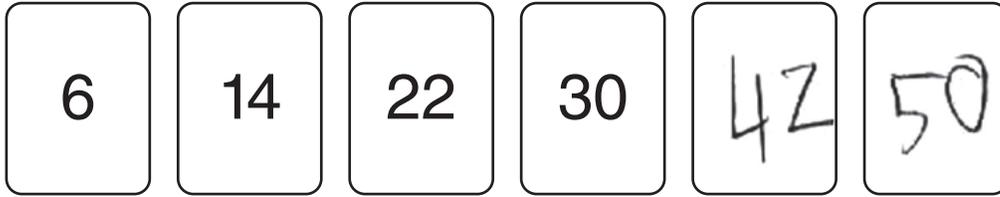
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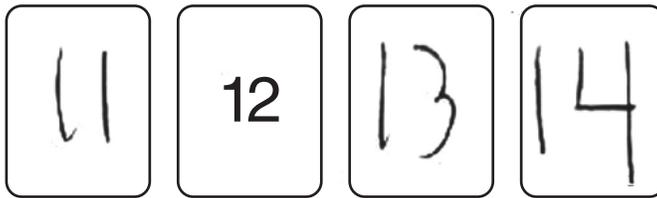
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Katherine uses the same rule as Jerome to make a new pattern. One number in Katherine's pattern is shown on these cards.



b. On the cards, write the missing numbers in Katherine's pattern.



- 16 Fred put red, green, and blue marbles into a bag. He put a total of 10 marbles into the bag. Fred will pick a marble from the bag without looking. He is **equally likely** to pick a red or blue marble and **more likely** to pick a green marble than a red marble.

Complete this chart to show the number of each color marble Fred could have put into the bag.

**Marbles in Fred's Bag**

Color	Number of Marbles
Red	1
Green	8
Blue	1



- 16 Fred put red, green, and blue marbles into a bag. He put a total of 10 marbles into the bag. Fred will pick a marble from the bag without looking. He is **equally likely** to pick a red or blue marble and **more likely** to pick a green marble than a red marble.

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**Marbles in Fred's Bag**

Color	Number of Marbles
Red	○○○
Green	○○○○
Blue	○○○



- 16 Fred put red, green, and blue marbles into a bag. He put a total of 10 marbles into the bag. Fred will pick a marble from the bag without looking. He is **equally likely** to pick a red or blue marble and **more likely** to pick a green marble than a red marble.

Complete this chart to show the number of each color marble Fred could have put into the bag.

**Marbles in Fred's Bag**

Color	Number of Marbles
Red	4
Green	5
Blue	1



- 16 Fred put red, green, and blue marbles into a bag. He put a total of 10 marbles into the bag. Fred will pick a marble from the bag without looking. He is **equally likely** to pick a red or blue marble and **more likely** to pick a green marble than a red marble.

Complete this chart to show the number of each color marble Fred could have put into the bag.

**Marbles in Fred's Bag**

Color	Number of Marbles
Red	4
Green	6
Blue	4



- 16 Fred put red, green, and blue marbles into a bag. He put a total of 10 marbles into the bag. Fred will pick a marble from the bag without looking. He is **equally likely** to pick a red or blue marble and **more likely** to pick a green marble than a red marble.

Complete this chart to show the number of each color marble Fred could have put into the bag.

**Marbles in Fred's Bag**

Color	Number of Marbles
Red	5
Green	3
Blue	2



- 16 Fred put red, green, and blue marbles into a bag. He put a total of 10 marbles into the bag. Fred will pick a marble from the bag without looking. He is **equally likely** to pick a red or blue marble and **more likely** to pick a green marble than a red marble.

Complete this chart to show the number of each color marble Fred could have put into the bag.

**Marbles in Fred's Bag**

Color	Number of Marbles
Red	30
Green	10
Blue	40