Student Name _____

3rd
4th
5th
6th
7th
8th
FS

M-Step™
Michigan Student Test of Educational Progress

Sample Items

Grade 3

Form S

MATHEMATICS

Spring 2015

MICHIGAN STATE BOARD OF EDUCATION
STATEMENT OF ASSURANCE OF COMPLIANCE WITH FEDERAL LAW

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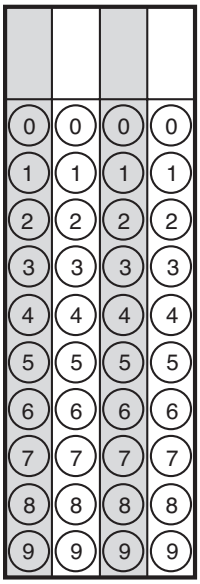
The sample items included in this set can be used by students and teachers to become familiar with the kinds of items students will encounter on the paper/pencil summative assessments. The sample items demonstrate the rigor of Michigan's academic content standards. They are not to be interpreted as indicative of the focus of the M-STEP assessments; they are simply a collection of item samples. Every standard is not included in this sample set.

1. A pencil has a mass of 25 grams. An apple has a mass that is 75 grams more than the pencil.

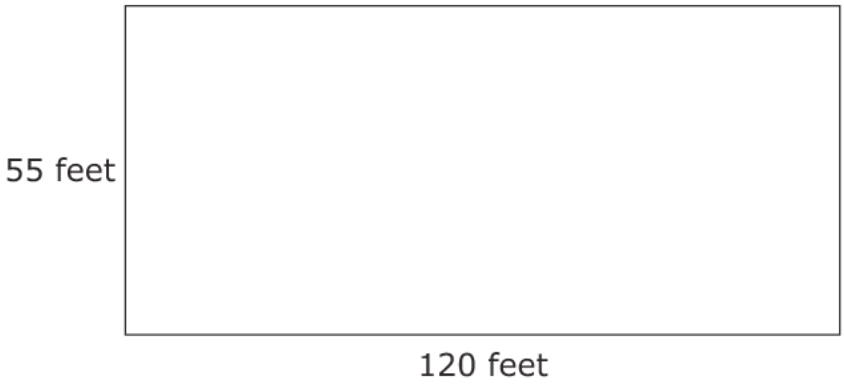
What is the mass of the apple in grams?



2. Does replacing the unknown with 7 make each equation true? Select Yes or No for each equation.

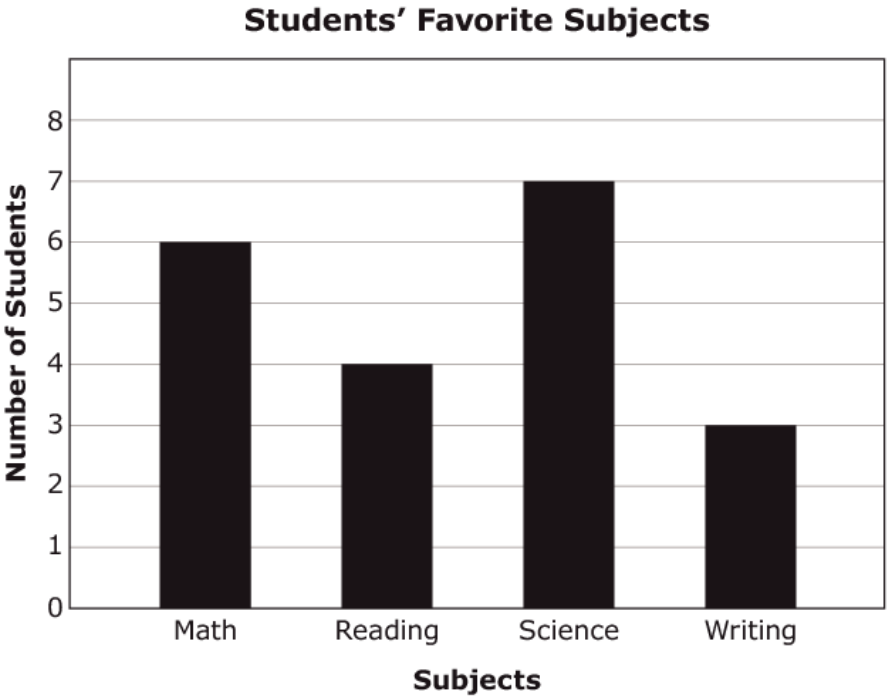
	Yes	No
$6 \times \square = 36$	☐	☐
$8 \times \square = 64$	☐	☐
$49 \div \square = 7$	☐	☐
$54 \div \square = 6$	☐	☐

3. A park is in the shape of a rectangle. The park is 120 feet wide and 55 feet long.



Enter the perimeter in feet of the city park.

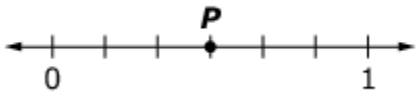
4. Students vote for their favorite school subjects. Use the bar graph to answer the question.



How many more students chose Math than chose Writing?

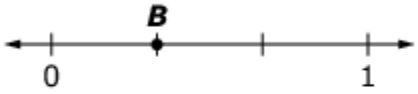
0	0	0	0
1	1	1	1
2	2	2	2
3	3	3	3
4	4	4	4
5	5	5	5
6	6	6	6
7	7	7	7
8	8	8	8
9	9	9	9

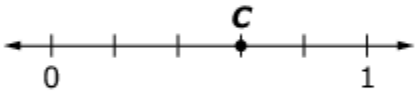
5. Use this number line to solve the problem.

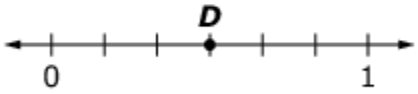


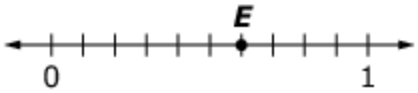
Choose **all** the number lines that show a number equal to the number shown by point *P*.

☐ 

☐ 

☐ 

☐ 

☐ 

6. Which expression is equal to 3 × 7?

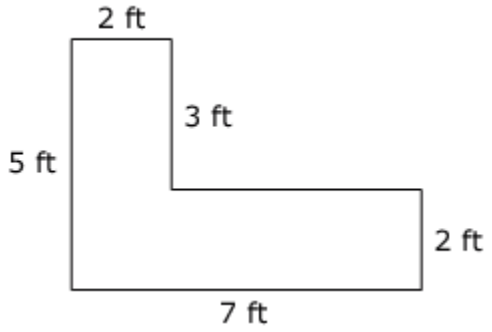
A. (2 × 7) + (1 × 7)

B. (7 × 5) − 2

C. (3 × 4) + (3 × 5)

D. (3 × 4) × 3

7. This figure is made by joining two rectangles.

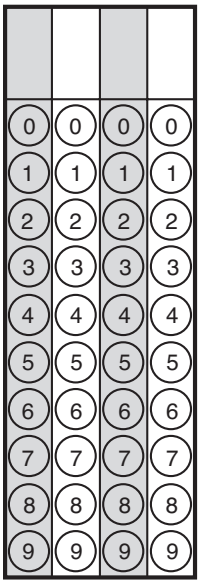


Enter the area in square feet of the figure.

0	0	0	0
1	1	1	1
2	2	2	2
3	3	3	3
4	4	4	4
5	5	5	5
6	6	6	6
7	7	7	7
8	8	8	8
9	9	9	9

8. Lily has 18 flowers. She plants them in 6 flower pots. Each flower pot has an equal number of flowers.

How many flowers are in each flower pot?



9. Use this clock to answer the question.

Select the time to the nearest minute shown on the clock.

A. 4:10

B. 4:49

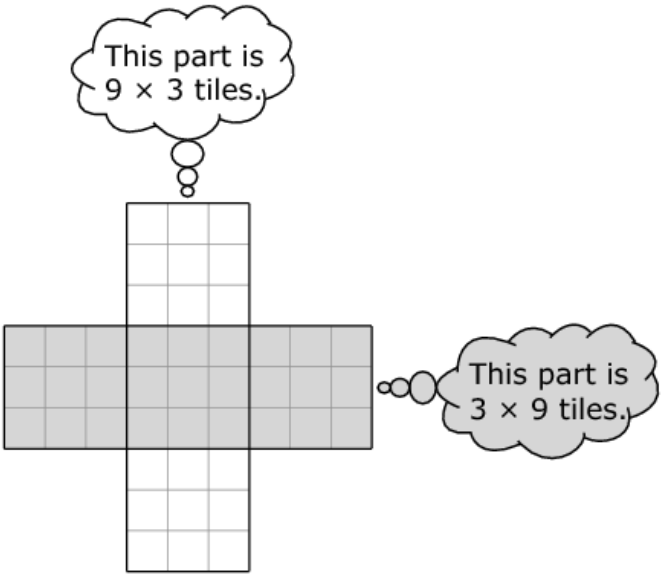
C. 5:10

D. 5:59

10. Decide if each equation is True or False for each question. Choose True or False for each equation.

	True	False
$3\times6=18\div2$	☐	☐
$4\times9=36\div4$	☐	☐
$2\times5=20\div2$	☐	☐

11. Tasha is doing an art project with square tiles. She needs to figure out how many tiles she will need. This picture shows her design. Tasha thinks:



Tasha says, "I need (9 × 3) + (3 × 9) = 27 + 27 = 54 tiles to make the design."

Which statement explains why Tasha is **not** correct?

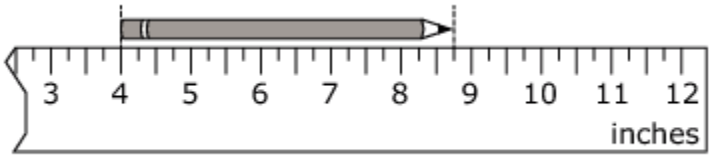
A. 27 + 27 does not equal 54.

B. (3 × 9) does not equal (9 × 3)

C. Tasha multiplied 9 × 3 incorrectly.

D. Tasha included the 9 squares in the middle twice.

12. Tracy has a broken ruler, but she can use it to measure the length of her pencil. What is the length in inches of the pencil shown?



A. 8 inches

B. $7\frac{3}{4}$ inches

C. 5 inches

D. $4\frac{3}{4}$ inches

13. Jeff has 6 markers. He estimates that the total mass of the markers is 54 grams.

Which statement could Jeff have used to make his estimate?

A. Three markers have a mass of about 35 grams.

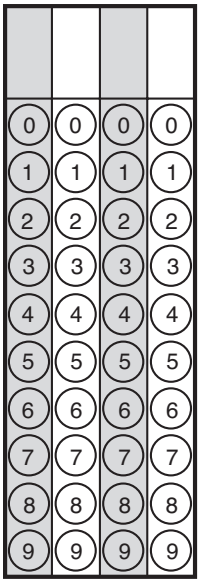
B. Three markers have a mass of about 18 grams.

C. Each marker has an equal mass of about 9 grams.

D. Each marker has an equal mass of about 7 grams.

14. What unknown number makes this equation true?

$904 - 256 = \square$



Answer Key

1. 100 grams

2. No, No, Yes, No

3. 350 feet

4. 3 students

5. 1st and 4th number lines

6. A

7. 20 square feet

8. 3 flowers

9. B

10. False, False, True

11. D

12. D

13. C

14. 648

3rd

4th

5th

6th

7th

8th

FS

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