

**MCA Paper Student
Readiness Tool
Grade 11 Mathematics**

m DEPARTMENT
OF EDUCATION

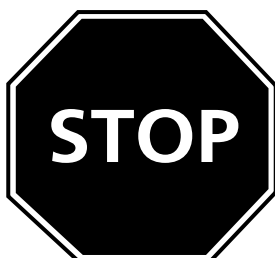
18 Point

Symbols on the Test

You will see the following symbols in your test book:



This symbol means you can continue answering questions on the next page.



This symbol means you have finished a segment. You must wait until you are told to go to the next segment.



When you finish a segment of the test, raise your hand to receive a sticker from the Test Monitor. Place this sticker on the symbols to seal the segment.

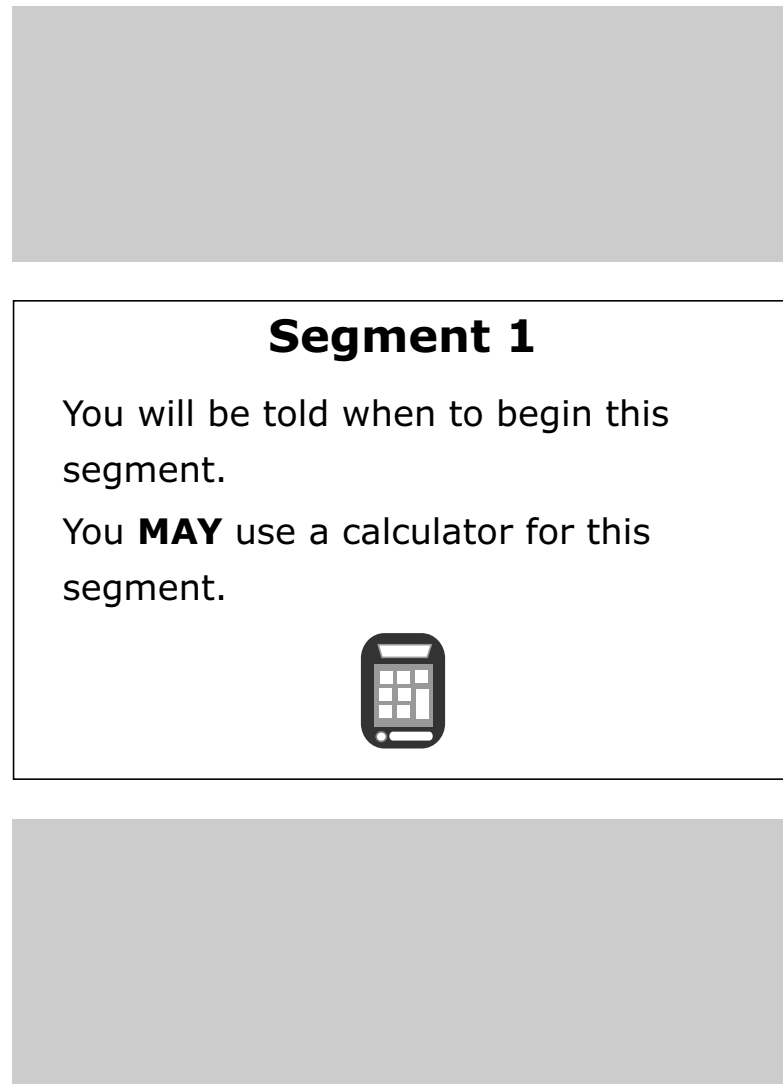


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Mathematics Test General Information

Put sticker
here

- Your test will contain different segments. Segment pages look like this:



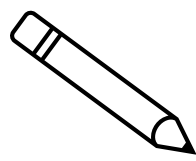
The diagram shows a page layout for a test segment. It consists of a large grey rectangular area at the top, followed by a white rectangular box with a black border. Inside this box, the text reads: **Segment 1**, followed by two lines of text: "You will be told when to begin this segment." and "You **MAY** use a calculator for this segment." Below the text is a small icon of a calculator. At the bottom of the diagram is another large grey rectangular area.

- You are allowed to use a calculator for all segments of the test.
- You can write in your test book or use scratch paper.
- You must answer each question in the test book.
- Your mathematics test includes multiple-choice and fill-in-the-blank questions.

Go on to the next page.

For multiple-choice questions, circle the answer in your test book. The sample below shows you how to do this.

Sample Question Answered in Test Book:



What is the value of p when $4p + 20 = -320$?

A. -85

B. -75

C. 75

D. 85

Go on to the next page.

Practice

Practice answering this multiple-choice question by circling option C.

1. What is the value of x if $x - 2 = 3 - x$?
 - A. 1.5
 - B. 2
 - C. 2.5
 - D. 3

Go on to the next page. 

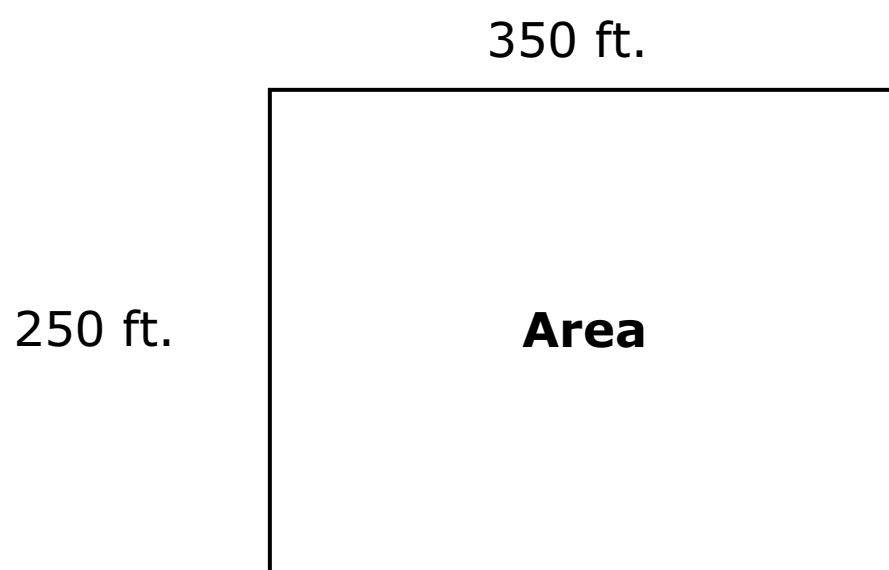
For fill-in-the-blank questions, you will need to write the answer in the space provided. You can also use this space to solve the question. The sample below shows you how to do this.

Note: Every fill-in-the-blank question includes instructions about which numbers and symbols can be used in your answers. It is important to follow these instructions when writing your answers.

Sample Question Answered in Test Book:

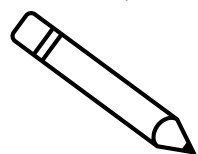
Please write your answer in the space below the question. You may use the digits: 0–9 and the symbols: slash for a fraction bar (/), a decimal (.), and a negative sign (-). If your answer is a mixed number, you must change it to an improper fraction or a decimal.

A fence is being built around an area with the dimensions shown.



The fencing will be 350 feet long and 250 feet wide. What is the total area, in square feet, within the fencing?

$$350 \text{ ft} \times 250 \text{ ft} = 87500 \text{ ft}^2$$



87500



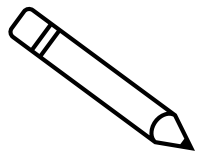
Go on to the next page.

For some fill-in-the-blank questions, you will need to write answers with negative signs and/or decimals. The sample below shows you how to do this.

Sample Question Answered in Test Book:

Please write your answer in the space below the question. You may use the digits: 0–9 and the symbols: slash for a fraction bar (/), a decimal (.), and a negative sign (-). If your answer is a mixed number, you must change it to an improper fraction or a decimal.

What is the value of $-3|-2x - y|$ when $x = -0.3$ and $y = \frac{1}{4}$?



$$\begin{aligned} & -3|-2(-0.3) - 1/4| \\ & -3|0.6 - 0.25| \\ & -3|0.35| \\ & -3(0.35) = -1.05 \end{aligned}$$

Go on to the next page. 

Practice

Practice answering this question in the space provided by writing -39.4 .

Please write your answer in the space below the question. You may use the digits: 0–9 and the symbols: slash for a fraction bar (/), a decimal (.), and a negative sign (-). If your answer is a mixed number, you must change it to an improper fraction or a decimal.

2. What is the value of $-4|-10x - y|$ when $x = -1.3$ and $y = 3.15$?

Go on to the next page. 

For some fill-in-the-blank questions, the answer may be a mixed number. It is important to change mixed numbers into improper fractions or decimals because the space bar character is not an accepted symbol. If an answer is given as a mixed number, it will be marked as incorrect. The sample below shows you how to do this.

Sample Question Answered in Test Book:

Please write your answer in the space below the question. You may use the digits: 0–9 and the symbols: slash for a fraction bar (/), a decimal (.), and a negative sign (–). If your answer is a mixed number, you must change it to an improper fraction or a decimal.

The Pythagorean Theorem is shown.

$$a^2 + b^2 = c^2$$

What is the value of c if $a = 3$ and $b = 2\frac{1}{4}$?

$$3^2 + (2\frac{1}{4})^2 = c^2$$

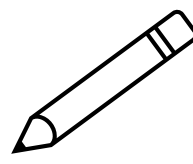
$$9 + (9/4)^2 = c^2$$

$$144/16 + 81/16 = c^2$$

$$225/16 = c^2$$

$$c = \sqrt{225/16}$$

$$c = 15/4$$



Go on to the next page.

Practice

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here

Practice answering this question in the space provided by writing $c = 10/9$.

Please write your answer in the space below the question. You may use the digits: 0–9 and the symbols: slash for a fraction bar (/), a decimal (.), and a negative sign (–). If your answer is a mixed number, you must change it to an improper fraction or a decimal.

- 3.** The Pythagorean Theorem is shown.

$$a^2 + b^2 = c^2$$

What is the value of c if $a = \frac{8}{9}$ and $b = \frac{2}{3}$?

