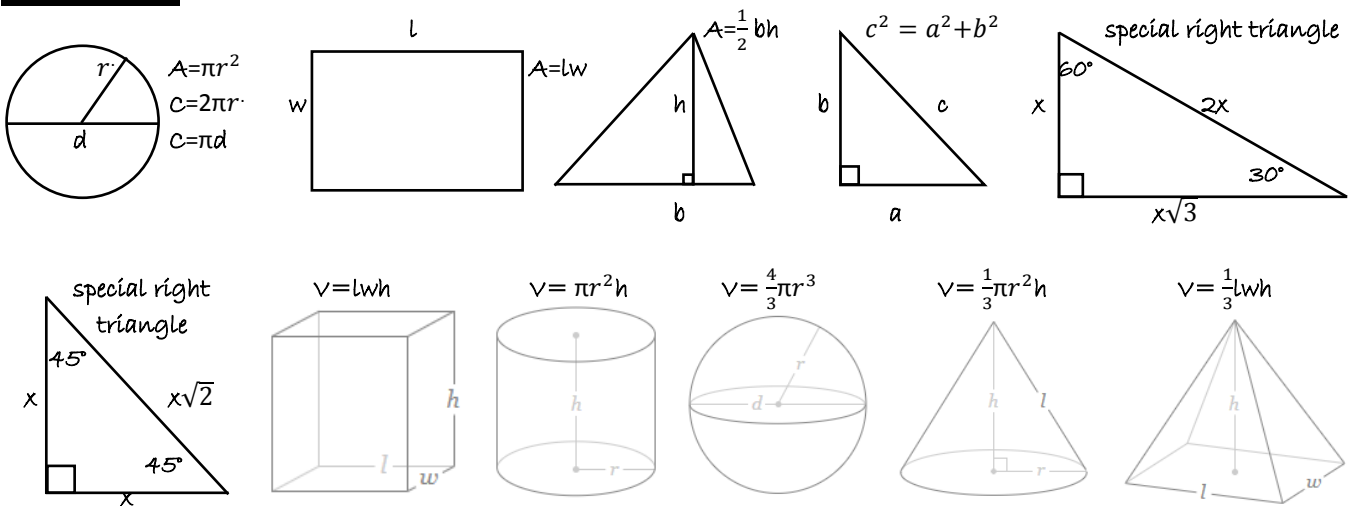# Math Test – No Calculator

25 MINUTES, 20 QUESTIONS

DIRECTIONS

For each question 1-15, given below, solve each question, and choose the best answer from the multiple choices given and completely fill in the appropriate bubble. Answers to questions 16-20 have to be entered in the grid. Please follow directions given before question number 16 to enter answers by properly filling in the bubbles in the grid. Any space available on the question paper may be used for scratch work.

NOTES

1) Calculator is not allowed in this section.
2) All coefficients, variables and other expressions are real numbers unless stated otherwise.
3) All figures shown in the test are to scale unless stated otherwise.
4) Unless stated otherwise, all figures lie in a two dimensional plane.
5) Unless stated otherwise, the domain of any function "f(x)" and variable "x" are all real numbers.

REFERENCES

$A=\pi r^2$
$c=2\pi r$
$c=\pi d$

$A=lw$

$A=\frac{1}{2}bh$

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

special right triangle ($60°$, $30°$, sides x, $2x$, $x\sqrt{3}$)

special right triangle ($45°$, $45°$, sides x, x, $x\sqrt{2}$)

$V=lwh$

$V=\pi r^2h$

$V=\frac{4}{3}\pi r^3$

$V=\frac{1}{3}\pi r^2h$

$V=\frac{1}{3}lwh$

There are 360 degrees in a circle.
There are 2π radians in a circle.
The sum of inside angles of a triangle is 180 degrees.

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15

DIRECTIONS

INSERT SAMPLE ANSWERS FOR GRID

For the questions 16-20, solve the questions and write the answers in the grid

A) You may want to write the answers above the bubbles to help you fill in the correct bubbles. Credit is given only for filling in the correct bubbles on the answer sheet.

B) Fill in only one bubble in each column.

C) you will not be penalized for a negative answer.

D) some questions may have two or more correct answers. In that case fill in the bubble for only one correct answer.

E) If your answer is a MIXED NUMBER, such as $5\frac{1}{2}$, convert it to a decimal number, i.e. 5.5 or an improper fraction, i.e. $\frac{11}{2}$ and entered in to the grid as such. Do not enter it in the grid as 5 1/2. It will be taken as $\frac{51}{2}$

F) If your answer is a DECIMAL NUMBER with more digits than the number of coumns in the grid, you must either round off or truncate the answer.

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STOP

If you finish before time is called, you may check your work on this section only.
Do not turn to any other section
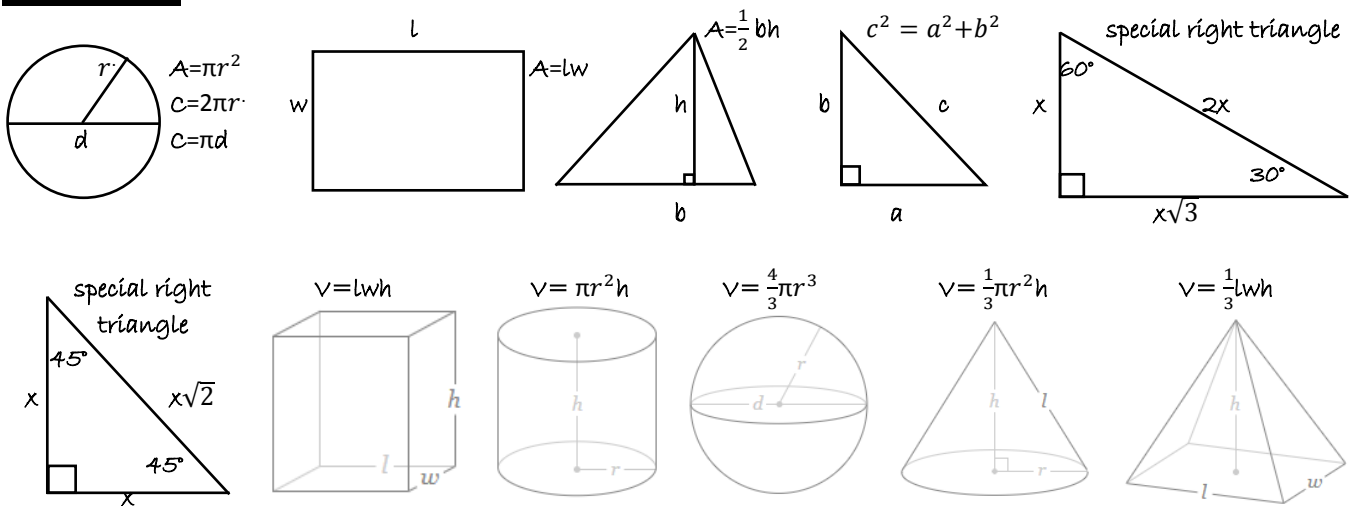
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Math Test – Calculator

55 MINUTES, 38 QUESTIONS

DIRECTIONS

For each question 1-30, given below, solve each question, and choose the best answer from the multiple choices given and completely fill in the appropriate bubble. Answers to questions 31-38 have to be entered in the grid. Please follow directions given before question number 31 to enter answers by properly filling in the bubbles in the grid. Any space available on the question paper may be used for scratch work.

NOTES

1) Calculator is allowed in this section.
2) All coefficients, variables and other expressions are real numbers unless stated otherwise.
3) All figures shown in the test are to scale unless stated otherwise.
4) Unless stated otherwise, all figures lie in two dimensional plane.
5) Unless stated otherwise, the domain of any function "f(x)" and variable "x" are all real numbers.

REFERENCES

$A = \pi r^2$
$C = 2\pi r$
$C = \pi d$

$A = lw$

$A = \frac{1}{2}bh$

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

special right triangle
$60°$ $2x$ $30°$ x $x\sqrt{3}$

special right triangle
$45°$ $x\sqrt{2}$ $45°$ x x

$V = lwh$

$V = \pi r^2 h$

$V = \frac{4}{3}\pi r^3$

$V = \frac{1}{3}\pi r^2 h$

$V = \frac{1}{3}lwh$

There are 360 degrees in a circle.
There are 2π radians in a circle.
The sum of inside angles of a triangle is 180 degrees.

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CONTINUED

29

30

DIRECTIONS

INSERT SAMPLE ANSWERS FOR GRID

For the questions 16-20, solve the questions and write the answers in the grid

A) You may want to write the answers above the bubbles to help you fill in the correct bubbles. Credit is given only for filling in the correct bubbles on the answer sheet.

B) Fill in only one bubble in each column.

C) you will not be penalized for a negative answer.

D) some questions may have two or more correct answers. In that case fill in the bubble for only one correct answer.

E) If your answer is a MIXED NUMBER, such as $5\frac{1}{2}$, convert it to a decimal number, i.e. 5.5 or an improper fraction, i.e. $\frac{11}{2}$ and entered in to the grid as such. Do not enter it in the grid as 5 1/2. It will be taken as $\frac{51}{2}$

F) If your answer is a DECIMAL NUMBER with more digits than the number of coumns in the grid, you must either round off or truncate the answer.

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STOP

If you finish before time is called, you may check your work on this section only.
Do not turn to any other section.