

Section 3 Practice Test

20 questions in 25 minutes without a calculator



<p>What is the most important word?</p> <p><i>WaitWhat?</i></p>	<p>Underline key math vocab words & circle numbers</p>
<p>Skip the mumbo jumbo</p> <p><i>BLM</i></p>	<p>Trust your eyes/instincts</p> <p></p>
<p>Break the problem into pieces</p> <p></p>	<p>It's a multiple choice test! I'm guessing the answer is:</p> <p>A B C D</p>
<p>Alphabet Soup</p> <p></p>	<p>Try $f(0)$ or $f(5)$</p> <p></p>
<p>Every number has a purpose</p> <p>Don't Ignore the Facts!</p> <p></p>	<p>$f(a) = b$ means (a, b)</p> <p>$f(a) = b$ means "put in a, got out b"</p>
<p>"In the xy-plane"</p> <p>Draw a graph!</p> <p></p>	<p>What would a cave(wo)man do?</p> <p>Draw a picture!</p> <p></p>
<p>This is a test about lines:</p> <p>$y = mx + b$, slope & y-int</p> <p></p>	<p>Write ordered pairs:</p> <p>(x, y)</p> <p></p>
<p>Fractions always</p> <p>start in the bottom</p> <p>$\frac{1}{\quad}$</p>	<p>It's an equation, with fractions, get a <u>common denominator</u>.</p> <p>$\frac{x}{a} + \frac{2}{a} = \frac{7}{a}$</p>
<p>$ax^2 + bx + c$</p> <p>It's another factoring problem!</p> <p>$(x \quad)(x \quad)$</p>	<p>$a^2 - b^2 = (a + b)(a - b)$</p> <p>SAT ♥ the difference of 2 squares</p> <p></p>
<p>The oldest trick in the book:</p> <p>$(ax + b)^2 = (ax + b)(ax + b)$</p> <p>When in doubt, write it out!</p>	<p>"Constant" means "number"</p> <p>#ConstantMeans#</p>
<p>Recognize Famous Numbers</p> <p>Squares: 1, 4, 9, 16, 25, 36, 49, 64, 81, 100, 121, 144, 169</p> <p>Cubes: 1, 8, 27, 64, 125, 216</p> <p>Powers of 2: $\frac{1}{2}, \frac{1}{4}, 1, 2, 4, 8, 16, 32, 64, 128, 256$</p> <p>Powers of 3: $\frac{1}{3}, 1, 3, 9, 27, 81, 243$</p> <p>Pythagorean Triples: 3-4-5 triangle & 5-12-13 triangle</p> <p>Trig Triangles: 30-60-90 triangle & 45-45-90 triangle</p>	<p>Solve a simpler problem:</p> <ul style="list-style-type: none"> - use easier numbers - ignore fractions - hide radicals

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

$A = \ell w$

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

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

Special Right Triangles

$V = \ell wh$

$V = \pi r^2 h$

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

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

$V = \frac{1}{3}\ell wh$

The number of degrees of arc in a circle is 360.
The number of radians of arc in a circle is 2π .
The sum of the measures in degrees of the angles of a triangle is 180.

DIRECTIONS
For questions 16-20, solve the problem and enter your answer in the grid, as described below, on the answer sheet.

Answer: $\frac{7}{12}$

Answer: 2.5

- Although not required, it is suggested that you write your answer in the boxes at the top of the columns to help you fill in the circles accurately. You will receive credit only if the circles are filled in correctly.
- Mark no more than one circle in any column.
- No question has a negative answer.
- Some problems may have more than one correct answer. In such cases, grid only one answer.
- Mixed numbers such as $3\frac{1}{2}$ must be gridded as 3.5 or 7/2. If $\frac{3}{1} \frac{1}{2}$ is entered into the grid, it will be interpreted as $\frac{31}{2}$.
- Decimal answers: If you enter a decimal answer with a trailing zero, it can be rounded or truncated, but it must be the entire grid.

Answer: 201 - either position is correct

Answer: 201

NOTE: You may start your answers in any columns, space permitting. Columns you don't need to use should be left blank.

Start with Free Response