



# ▶ Practice Skills for LEAP 21: Mathematics, Grade 8 Student Worksheets

Reaching For Results



October 2003  
Louisiana Department of Education  
Cecil J. Picard  
State Superintendent of Education



## **Louisiana State Board of Elementary and Secondary Education**

Mr. Paul Pastorek, *President*, Member-at-Large  
Dr. James Stafford, *Vice-President*, 5<sup>th</sup> District  
Mr. Keith Johnson, *Secretary-Treasurer*, 2<sup>nd</sup> District  
Mr. Dale Bayard, 7<sup>th</sup> District  
Ms. Glenny Lee Buquet, 3<sup>rd</sup> District  
Ms. Donna Contois, 1<sup>st</sup> District  
Mr. Gerald Dill, Member-at-Large  
Ms. Leslie Jacobs, Member-at-Large  
Ms. Linda Johnson, 8<sup>th</sup> District  
Mr. Walter Lee, 4<sup>th</sup> District  
Dr. Richard Musemeche, 6<sup>th</sup> District

Ms. Weegie Peabody, *Executive Director*

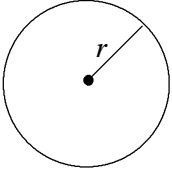
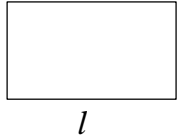
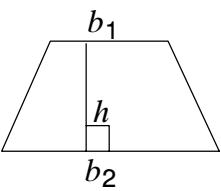
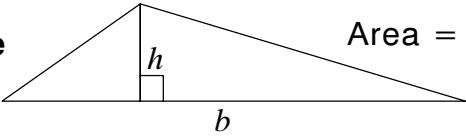
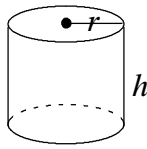
---

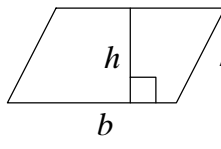
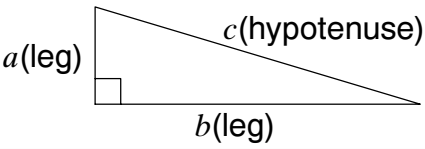
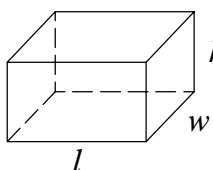
For further information, contact

Division of Student Standards and Assessments  
1-877-453-2721  
[www.louisianaschools.net](http://www.louisianaschools.net)

---

Use the information below to answer questions on the Mathematics test.

<b>Circle</b>		$\pi \approx 3.14$ $\text{Area} = \pi \cdot r^2$ $\text{Circumference} = 2\pi \cdot r$
<b>Rectangle</b>		$\text{Area} = l \cdot w$ $\text{Perimeter} = 2(l + w)$
<b>Trapezoid</b>		$\text{Area} = \frac{1}{2} h(b_1 + b_2)$
<b>Triangle</b>		$\text{Area} = \frac{1}{2} b \cdot h$
<b>Cylinder</b>		$\text{Volume} = \pi \cdot r^2 \cdot h$ $\text{Surface Area} = 2\pi \cdot r^2 + 2\pi \cdot r \cdot h$

<b>Parallelogram</b>		$\text{Area} = b \cdot h$
<b>Pythagorean Theorem:</b> $a^2 + b^2 = c^2$		
		
<b>Rectangular Solid</b>		
		$\text{Volume} = l \cdot w \cdot h$ $\text{Surface Area} = 2wl + 2lh + 2wh$

Metric Units of Length
<p><b>1 kilometer = 1,000 meters</b></p> <p><b>1 centimeter = 0.01 meter</b></p> <p><b>1 millimeter = 0.001 meter</b></p>

U.S. Unit Conversions
<p><b>8 fluid ounces = 1 cup</b></p> <p><b>2 cups = 1 pint</b></p> <p><b>2 pints = 1 quart</b></p> <p><b>4 quarts = 1 gallon</b></p> <p><b>16 ounces = 1 pound</b></p> <p><b>5,280 feet = 1 mile</b></p>

<b>Distance Formula: distance = rate • time</b>	
<b>Mean:</b>	In a collection of data, the sum of all the data divided by the number of data
<b>Median:</b>	The middle number or average of the two middle numbers in a collection of data when the data are arranged in order
<b>Mode:</b>	The number or numbers that occur most often in a collection of data
<b>Range:</b>	The difference between the greatest and the least numbers in a collection of data