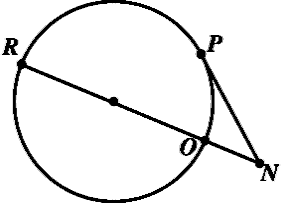


Algebra and Geometry Review 11

<p>1. Add the matrices.</p> $\begin{bmatrix} 2 & 0 \\ -1 & 3 \\ 4 & -2 \end{bmatrix} + \begin{bmatrix} -3 & 4 \\ 5 & -3 \\ -1 & 0 \end{bmatrix}$	<p>2. If you rotate the space bounded by the lines $x = 4$, $y = 2$, the x and y axis around the x-axis, what shape will be formed?</p>
<p>3. Multiply.</p> $(2x - 1)(3x + 4)$	<p>4. Find the length of \overline{PN} if \overline{RN} has a length of 12 and \overline{ON} has a length of 4.</p> 
<p>5. Gas cost \$2.53 per gallon in May. In September, gas cost \$3.05 per gallon. What was the percent change in the cost of a gallon of gas?</p>	<p>6. Find the volume of a sphere if it has a radius of 4. Leave π in your answer.</p>
<p>7. Evaluate.</p> $5(3 - 2)^2 + 4 - (4 \div 2)$	<p>8. If a 32 ft. tall tree casts an 8 ft. shadow, how long of a shadow does a 6 ft. tall man have?</p>
<p>9. If two lines are perpendicular, what is the product of their slopes?</p>	<p>10. How many degrees are in the exterior angles of a pentadecagon?</p>