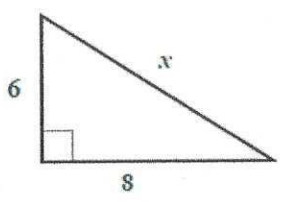


Name _____
Mrs. Roubos

Date _____
8R Period _____

Take Home Quiz # 7

Due: _____
Show all work where necessary

<p>1) Write 0.64 as a fraction in <u>reduced form</u>.</p> <p>A) $\frac{16}{25}$ B) $\frac{64}{100}$</p> <p>C) $\frac{32}{50}$ D) $\frac{1}{64}$</p> <p style="text-align: right;">2</p>	<p>2) Which of the following is an <u>irrational</u> number?</p> <p>A) 787 B) $\frac{13}{17}$</p> <p>C) 4.5102 D) $\sqrt{620}$</p> <p style="text-align: right;">2</p>
<p>3) Find the value of: 2^{-2}</p> <p>A) 1 B) $\frac{1}{4}$</p> <p>C) 0 D) $\frac{1}{2}$</p> <p style="text-align: right;">2</p>	<p>4) Write the number 0.00000123 in <u>scientific notation</u>.</p> <p>A) 123 B) 123×10^6</p> <p>C) 1.23×10^6 D) 1.23×10^{-6}</p> <p style="text-align: right;">2</p>
<p>5) Write the following in <u>standard form</u>: 2.25×10^5</p> <p>A) 22500 B) 225000</p> <p>C) 22500000 D) 2.25000</p> <p style="text-align: right;">2</p>	<p>6) Simplify: $10x + 2$ when $x = 5$. <u>SHOW WORK!</u></p> <p>A) 5 B) 50 C) 52 D) 60</p> <p style="text-align: right;">2</p>
<p>7) Which of the following is the <u>formula</u> for the volume of a <u>cylinder</u>?</p> <p>A) $V = 2\pi r$ B) $V = 2\pi rh$</p> <p>C) $V = 2\pi r^2h$ D) $V = \pi r^2h$</p> <p style="text-align: right;">2</p>	<p>8) How many solutions does the following equation have? <u>SHOW WORK!</u> $4(x + 3) = 4x + 12$</p> <p style="text-align: right;">3</p>
<p>9) Solve for x: <u>SHOW WORK!</u></p>  <p style="text-align: right;">4</p>	<p>10) Solve for x: <u>SHOW WORK!</u></p> $6(x + 2) - 5 = 2x + 15$ <p style="text-align: right;">4</p>

11) What volume of ice cream is contained in a 10 cm-high ice cream cone with a base radius of 4cm? Formula: $V = \frac{1}{3}\pi r^2 h$ **SHOW WORK!**

4

12) Find the volume of a sphere with a radius of 7cm. Formula: $V = \frac{4}{3}\pi r^3$ **SHOW WORK!**

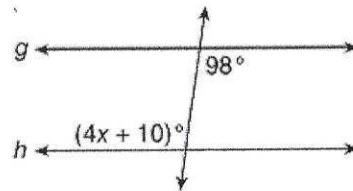
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13) Can the following numbers represent the lengths of the sides of a right triangle? Prove mathematically. **SHOW WORK!** Explain your answer.

{5, 4, 8}

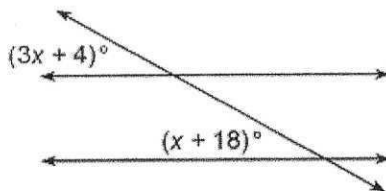
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14) Solve for x: **SHOW WORK**



4

15) Solve for x: **SHOW WORK!**



4

16) A ladder 12 feet long is leaning against a building. How high on the building will the ladder reach when the bottom of the ladder is 5 feet from the building? Round our answer to the nearest tenth. **Make sure to draw a diagram. Show all work!!**

5