

Name: _____

Date: _____

UNIT 8

LESSON 1

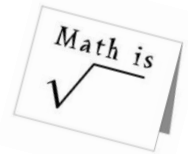
Do Now:

<p>a) Which expression is rational?</p> <p>(1) π (2) 0.76 (3) $\sqrt{14}$ (4) $\sqrt{12}$</p> <p>Define Rational _____</p> <p>_____</p>	<p>b) Which number is irrational?</p> <p>(1) $\frac{5}{4}$ (2) $0.\bar{3}$ (3) $\sqrt{121}$ (4) π</p> <p>Define Irrational _____</p> <p>_____</p>
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List the first fifteen perfect squares starting with one.

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Aim: SIMPLIFYING RADICALS



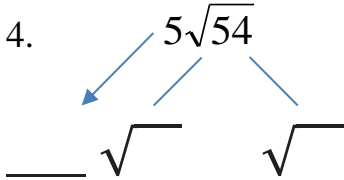
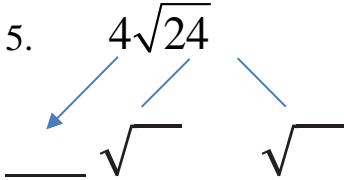
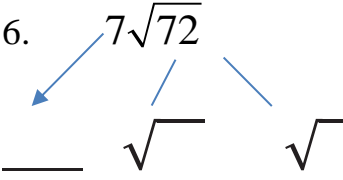
The quantity or expression under the radical sign is called the _____.

DIRECTIONS: SIMPLIFY THE FOLLOWING RADICALS.

<p>1. $\sqrt{12}$</p> <p style="text-align: center;">/ \</p> <p>$\sqrt{\quad}$ $\sqrt{\quad}$</p>	<p>2. $\sqrt{27}$</p> <p style="text-align: center;">/ \</p> <p>$\sqrt{\quad}$ $\sqrt{\quad}$</p>	<p>3. $\sqrt{500}$</p> <p style="text-align: center;">/ \</p> <p>$\sqrt{\quad}$ $\sqrt{\quad}$</p>
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STEPS FOR SIMPLIFYING RADICALS:

1. Find factors of the _____ that has the _____ perfect square.
2. Write both factors- put the highest perfect square _____.
3. _____ the “perfect” radical (comes out of the radical!) and keep the non “perfect” radical.

<p>4. $5\sqrt{54}$</p> 	<p>5. $4\sqrt{24}$</p> 	<p>6. $7\sqrt{72}$</p> 
<p>7. $4\sqrt{96}$</p>	<p>8. $8\sqrt{48}$</p>	<p>9. $2\sqrt{75}$</p>
<p>10. $2\sqrt{288}$</p>	<p>11. $2\sqrt{9}$</p>	<p>12. $10\sqrt{50}$</p>
<p>13. $5\sqrt{98}$</p>	<p>14. $2\sqrt{300}$</p>	<p>15. $9\sqrt{18}$</p>