Name: _____ Unit 1 Extra Credit!

COMPLETE THE PROBLEM IN EACH BOX. EARN POINTS AS OUTLINED BELOW! ☺

ALL rows, columns, and diagonals correct: + .4/20 on quiz

6-7 rows, columns, and diagonals correct: + .3/20 on quiz

4-5 rows, columns, and diagonals correct: + .2/20 on quiz

1-4 rows, columns, and diagonals correct: + .1/20 on quiz

The sum of a rational number & an irrational number is irrational. Which expression supports this statement? ○ $\sqrt{3}+\sqrt{3}$ ○ $1+\sqrt{2}$ ○ $5+7$ ○ $3+\frac{1}{2}$	Which statement correctly describes why the product $0.123(0.\overline{23})$ is a rational number? ○ It is a repeating decimal. ○ It is a terminating decimal. ○ It can be written as a perfect square. ○ It is a non-terminating, non-repeating decimal.	Describe why 0.34 * √15 is irrational. ○ It is irrational because the product can be expressed as a non-terminating, non-repeating decimal. ○ It is irrational because the product can be expressed as a ratio of two integers. ○ It is rational because the product can be expressed as a non-terminating decimal.
The sum of an irrational number & a rational number is irrational. Select the expressions that prove this to be true. ☐ -16+4.72 ☐ $\frac{25}{12}+\sqrt{30}$ ☐ $\sqrt{10}+\sqrt{33}$ ☐ $0.\overline{77}+\sqrt{\frac{6}{7}}$ ☐ $\sqrt{2}+0.125$	The sum or product of two rational numbers is rational. Select the expressions that support this statement. ☐ $-14\sqrt{144}$ ☐ $\frac{15}{4}+0.\overline{23}$ ☐ $\sqrt{19}+\frac{5}{9}$ ☐ $5.817\cdot\sqrt{15}$ ☐ $\pi\sqrt{49}$	The sum of an irrational number & a rational number is irrational. Select the expressions that prove this to be true. ☐ $\sqrt{\frac{93}{112}}+\sqrt{64}$ ☐ $3.55+\frac{45}{23}$ ☐ $\sqrt{45}+\frac{45}{23}$ ☐ $\sqrt{43}+\sqrt{90}$ ☐ $0.\overline{44}+0.\overline{66}$
The product of two rational numbers is rational. Select the expressions that prove this to be true. ☐ $0.123\cdot\frac{4}{5}$ ☐ $\frac{3}{7}\cdot\sqrt{56}$ ☐ $0.\overline{9}\cdot 3.8$ ☐ $\sqrt{17}\cdot\sqrt{7}$ ☐ $0\cdot\sqrt{30}$	Which statement correctly describes why (2/3)√50 is irrational? ○ It is a terminating decimal. ○ It is a repeating decimal. ○ It can be written as a ratio of two integers. ○ It is a non-terminating, non-repeating decimal.	Which statement correctly describes pi + √14? ○ It is a repeating decimal. ○ It is a terminating decimal. ○ It can be written as a ratio of two integers. ○ It is a non-terminating, non-repeating decimal.