QUIZ 2

Take out your homework, so I can check it.

Use dimensional analysis to make each conversion. Write your answer with the correct number of significant digits. Use the equivalent measures indicated.

15. A bedroom is 5.2 meters wide. Find its width in feet. (1 m $\approx$ 3.28 ft)

17 feet

16. A bag of rice has a mass of 3.18 pounds. Find its mass in kilograms. (1 kg $\approx$ 2.2 lb)

1.4 kg

17. A giraffe can run about 14 meters per second. Find its speed in miles per hour. (1 mi = 5280 ft; 1 m $\approx$ 3.28 ft)

31 mile per hr

22. **Analyze Relationships** When a measurement in inches is converted to centimeters, will the number of centimeters be greater than or less than the number of inches? Explain.

Greater b/c centimeters is a small unit of measure than inches

Using *whole*, *integer*, *rational*, and *irrational*, name all the subsets of the real numbers to which each number belongs.

11. 15

rational

12. $\frac{\pi}{2}$

irrational

13. $-\frac{\sqrt[3]{8}}{2}$

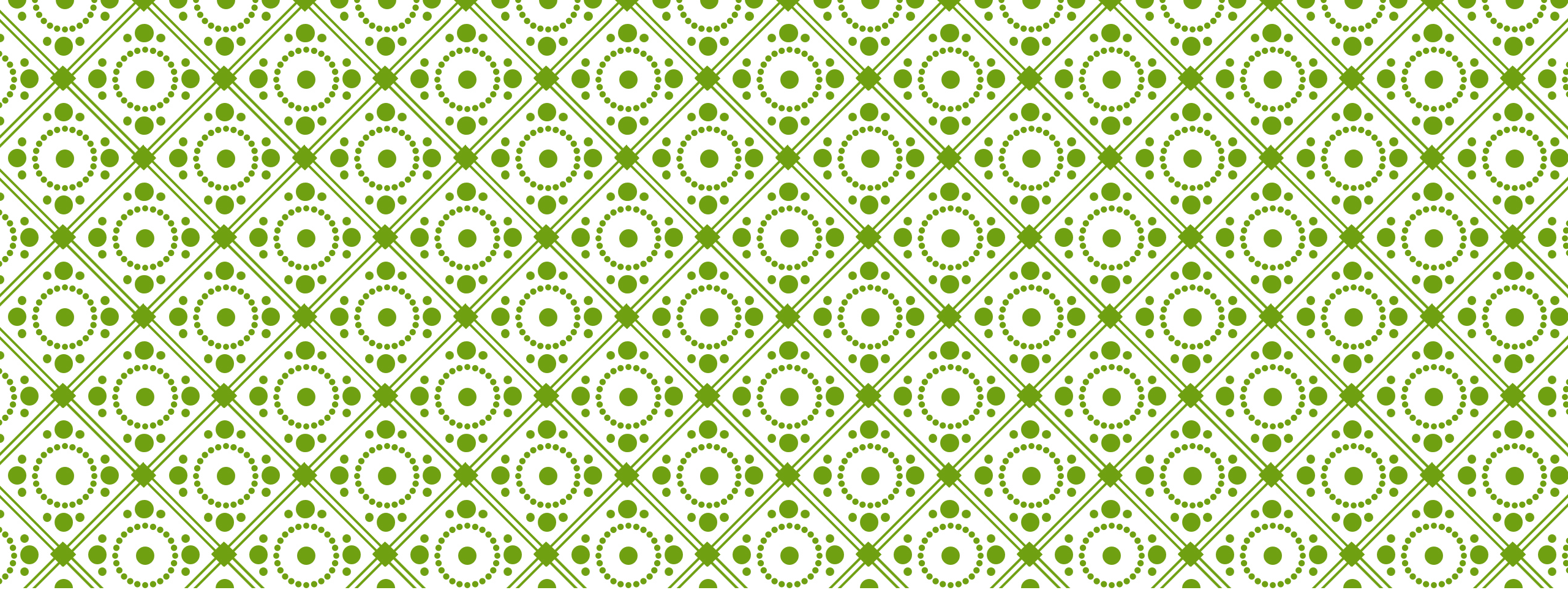
rational

14. $\frac{\sqrt{36}}{\sqrt{9}}$

rational

15. $\frac{0}{\sqrt{7}}$

rational



RECAP

Goal: To identify, evaluate and use operations with expressions/polynomials.

Obj: SWBAT complete problems from the chapter.

PROBLEM 1:

Evaluate the expression when $x = 3$ and $y = -2$

$20x \div 2y + 7$

$3y^2 + (x - y)$

PROBLEM 1A:

Evaluate the expression when $x = 3$ and $y = -2$

$5x - 2(7 - y)^2$

$8 - 12y \div 4x$

PROBLEM 2:

Write an equivalent expression in simplest form.

$7x - 10 + 6xy - 22x + 15 - 9xy$

PROBLEM 2A:

Write an equivalent expression in simplest form.

$5x^2 - 7x^2y^3 + 8 + 9x^2y^3 - 3 + 4x^2$

PROBLEM 3:

Marco rode 120 miles on the first day of his cross-country bicycle trip. He planned to ride an additional 100 miles each day.

Write an algebraic expression to represent the total number of miles he will ride after (d) days have passed.

PROBLEM 3A:

Alex purchased a phone card for $30. He has used (t) minutes of access time at 10 cents per minute.

Write an algebraic expression to represent how many dollars Alex has left on his card.

PROBLEM 4:

The area of the large rectangle is $5x^2 + 3x + 7$ and the area small rectangle is $2x^2 + 3$. What is the area of the shaded green region as a polynomial?