## Weekly Warm Up:

Note: This is your Review Sheet/Practice for the Unit 3 exam. Just using your notes and doing practice problems as well!

## Monday 11/5:

1. 1 Which expression is equivalent to $\left(8 w^{7} x^{-5} y^{3} z^{-9}\right)^{-\frac{2}{3}}$ ?

A $\frac{x^{\frac{10}{3}} z^{6}}{4 w^{\frac{14}{3}} y^{2}}$
B $\quad \frac{4 w^{\frac{14}{3}} y^{2}}{x^{\frac{10}{3}} z^{6}}$
C $\frac{2 w^{\frac{5}{3}} x^{\frac{1}{3}}}{x^{\frac{7}{3}} z^{\frac{11}{3}}}$
D $\quad \frac{x^{\frac{7}{3}} z^{\frac{11}{3}}}{2 w^{\frac{5}{3}} y^{\frac{1}{3}}}$
2. Simplify: $-4 x \sqrt{216 m x^{3}}$

3. Simplify: $(2 i-3)(4+6 i)$
4. Simplify and rewrite as a radical:

$$
8 x\left(27 x^{2} 3 x^{3}\right)^{1 / 4}
$$

5. $2 \sqrt[4]{x} \cdot \sqrt[5]{x}$ (hint: there is a way to multiply these, you should get a monomial answer)
6. Simplify and write as radical:

$$
\frac{6 x y^{3}}{3 x^{2} y^{\frac{2}{5}}}
$$

## Unit 3 Review Sheet HONORS

this review is not enough. You need to be looking through

## MONDAY HOMEWORK:

1. Given $\mathrm{L}=\sqrt{3 m^{3}}$ and $\mathrm{W}=\sqrt{16 m^{3} n^{5}}$. Find the Area
2. Simplify: $-3 \sqrt{45}+2 \sqrt{12}+3 \sqrt{6}-3 \sqrt{20}$
3. The equation $s=2 \sqrt{5 x}$ can be used to estimate the speed, $s$, of a car in miles per hour, given the length in feet, $x$, of the tire marks it leaves on the ground. A car traveling 90 miles per hour came to a sudden stop. According to the equation, how long would the tire marks be for this car?
A 355 feet
B 380 feet
C 405 feet
D 430 feet
4. $2 x \sqrt{145 x^{2}} \bullet 2 \sqrt{30 y^{4}}$
5. Rewrite in exponential form: $(\sqrt[5]{3 x})^{4}$

6. Simplify:

$$
\frac{6+\sqrt{3}}{4-\sqrt{3}}
$$

1. Simplify: $3 y^{2} \sqrt{-76 x^{2} y^{5}}$
2. Simplify: $(3-2 \sqrt{ } 2)^{2}$

3. Solve: $2 \sqrt{x+2}-2 x=4 x$
4. Simplify: $\frac{4 x \sqrt{8 x^{5}}}{5 x^{2} \sqrt{2 x}}$
5. 

The force, $F$, acting on a charged object varies inversely to the square of its distance, $r$, from another charged object. When the two objects are 0.64 meter apart, the force acting on them is 8.2 Newtons. Approximately how much force would the object feel if it is at a distance of 0.77 meter from the other object?

A 1.7 Newtons
B 5.7 Newtons
C 11.9 Newtons
D 12.9 Newtons
2. Given a rectangle has a length of $3 \sqrt{8}$ and a width of $3 \sqrt{2}$, find the perimeter.
3. In building a brick wall, the amount of time it takes to complete the wall varies directly with the number of bricks in the wall and varies inversely with the number of bricklayers that are working together. A wall containing 1200 bricks, using 3 bricklayers, takes 18 hours to build. How long would it take to build a wall of 4500 bricks if 5 bricklayers worked on it?
4. Solve: $\sqrt{2 x^{2}-7}=3-x$
5.

The time, $t$, in hours, that it takes $x$ people to plant $n$ trees varies directly with the number of trees, and inversely with the number of people. Suppose 6 people can plant 12 trees in 3 hours. How many people are needed to plant 28 trees in 5 hours and 15 minutes?

