

Simplify:

$$\textcircled{1} \frac{\sqrt{3}-2\sqrt{6}}{4\sqrt{2}} \left(\frac{\sqrt{2}}{\sqrt{2}} \right)$$

$$\rightarrow = \frac{\sqrt{6}-2\sqrt{12}}{4(2)} \sqrt{4 \times 3}$$

$$= \frac{\sqrt{6}-4\sqrt{3}}{8}$$

✓

$$= \frac{2\sqrt{30}+16\sqrt{5}-3\sqrt{3}-12\sqrt{2}}{29}$$

$$= \frac{-2\sqrt{30}-16\sqrt{5}+3\sqrt{3}+12\sqrt{2}}{29}$$

$$\textcircled{2} \frac{2\sqrt{10}-3}{\sqrt{3}-2\sqrt{8}} \left(\frac{\sqrt{3}+2\sqrt{8}}{\sqrt{3}+2\sqrt{8}} \right)$$

Binomial = 2\sqrt{2}

$$= \frac{2\sqrt{30}+4\sqrt{80}-3\sqrt{3}-6\sqrt{6}}{3-4(8)}$$

$$= \frac{2\sqrt{30}+16\sqrt{5}-3\sqrt{3}-12\sqrt{2}}{3-32}$$

$$= \frac{2\sqrt{30}+16\sqrt{5}-3\sqrt{3}-12\sqrt{2}}{-29}$$

UNIT REVIEW

- Rational / Irrational #s
→ simplify (Mixed ↔ Entire)
- Radicals → calculator
- Radicals ↔ Exponents: $(\sqrt[n]{x^m}) = x^{\frac{m}{n}}$

- Negative Exponents

$$\sqrt[n]{x^m} = x^{\frac{m}{n}}$$

$$\textcircled{1} b^{-x} = \frac{1}{b^x}$$

$$\textcircled{2} \left(\frac{a}{b}\right)^{-x}$$

$$\textcircled{3} \frac{a^{-x}}{b} = \frac{1}{a^x b}$$

$$\left(\frac{b}{a}\right)^x$$

$$\frac{b^{-1}}{a^x}$$

- Laws of Exponents

⇒ Zero Exponent

⇒ Writing to a common Base

- Operations with Radicals

⇒ Add, Subtract, Multiplying (Square), Division
(Rationalizing)

Test: Monday, Oct. 3

How should you prepare?

→ Look over old questions

→ Know your facts

→ PRACTICE!!

→ Sheets → Quiz

→ Textbook

→ Warmups

Review from text:

Pg. 246 - 249