Algebra And Number - AN2 Review

Outcome Checklist

In order to find success on the test, check if you can:

- ☐ Identify the properties of **rational** and **irrational** numbers
- ☐ Determine whether a number is **rational** or **irrational**
- ☐ Convert an **entire radical** to a **mixed radical** in simplest form
- ☐ Convert a **mixed radical** to an **entire radical**
- ☐ Identify where a radical fits on a number line **without using a calculator** and **why**

Practice

Rational And Irrational Numbers

1. In your own words define a **rational number**:

2. If a **rational number** is a decimal explain its properties:

3. Identify the two defining properties of **irrational numbers**:
   i.
   ii.

4. Identify whether each number is **rational** or **irrational**, and explain why:

   (a) π (b) $\sqrt{2}$ (c) $0.\overline{666}$ (d) 1.2546 (e) $\frac{\sqrt{5}}{2}$ (f) $0.5\overline{64}$ (g) $\frac{\pi}{2}$ (h) $\frac{567}{3}$ (i) 1.12345 (j) $\sqrt{16}$

Radicals

1. Convert each entire radical to a mixed radical in simplest form:

   i. $\sqrt{98}$ ii. $\sqrt{32}$ iii. $\sqrt{128}$ iv. $\sqrt[3]{40}$

2. Convert each mixed radical to an entire radical:

   i. $4\sqrt{5}$ ii. $7\sqrt{2}$ iii. $8\sqrt{3}$ iv. $3\sqrt[3]{9}$

3. Identify where each number will fit on a number line **without using a calculator**:

   i. $6\sqrt{2}$ ii. $4\sqrt{5}$ iii. $3\sqrt[3]{2}$

For The Remainder Of Class Work On D2L Quizzes And Take Home Assignment.