N3CS19 Practice Set 10

Instructions: Answer each question on loose leaf, quad-ruled (graph paper), headed properly and written in lead-graphite. Remember to fold paper along the center, work exercises in order top to bottom, left column then right column. Staple multiple pages

1) Write as the product of its *simplest* rational and irrational factor.

a) $\sqrt{28}$ b) $\sqrt{54}$ c) $\sqrt{60}$

2) Write each repeating decimal as a fraction; write fractions in lowest terms

a) $0.\overline{7}$ b) $0.\overline{78}$ c) $0.8\overline{3}$

3) A square has an area of $289cm^2$; determine its perimeter. (*hint: draw a square!)*

4) Simplify; write exponents as positive.

a) 6^{-4} b) $\left(6^{-2}\right)^3$ c) $\left(6x^{-4}\right)^2$

5) A cube has a side length of $4n^3$ units; write a simplified expression for the volume of the cube.

6) Solve the square equations; simplify your result like #1

a) $x^2 = 40$ b) $n^2 = 12$ c) $s^2 = \frac{32}{80}$

7)
a) LeBron James scored 9 points in his first game as a Laker; name all the number families of Real Numbers this number of points belongs to.

b) Lebron James made 2 of 9 $\left(\frac{2}{9}\right)$ shots in his first game as a Laker; name all the number families of Real Numbers this belongs to.

8) Estimate the square roots to the nearest integer.

a) $\sqrt{19}$ b) $\sqrt{33}$ c) $\sqrt{56}$