

2021-02-10-M-T-W-3

Ch2.56. #1, 8, 27, 36

S. 7# 7, 9, 11, 17

6) Irrational rationalization

$\frac{3\sqrt{2}}{5\sqrt{2}}$ isn't irrational, the $\sqrt{2}$ cancels out because it is in the numerator & denominator

8) $\frac{4}{9}$ = rational, two rational numbers

1.75 = rational, terminates

$\frac{\sqrt{20}}{3\sqrt{5}}$ = irrational, square root of prime

$\frac{\sqrt{2}}{14}$ = irrational, square root of prime

3.14159 = rational, terminates

22) Rational Sums: $\frac{a}{b} + \frac{c}{d} = \frac{a+d}{b+c}$

$a=1$ $b=2$ $c=3$ $d=4$

$$\frac{d \cdot a + c \cdot b}{b \cdot d} = \frac{4 + 6}{2 \cdot 4} = \frac{10}{8} = \frac{5}{4}$$

36) \sqrt{p} if p is prime, if \sqrt{p} will equal a rational num. because you can't factor anything out

2021-02-10-M-HW-5

57. # 7, 9, 11, 17

→ No, it is the square root of a prime,
it will not be a repeating decimal

i) between 3.14159 and 3.14159001
3.141590005

ii) irrational between 0.0001 & 0.00010001
0. 0001

17) 1.28901 as fraction

$$\frac{128901}{100000}$$