Fill in the blanks:
(2 pts. each)

1) A _____ number is divisible by only two numbers, one and itself.

2) The _____ of any rational number is a rational number where the numerator and denominator are reversed. The product of the two rational numbers equals 1.

3) –7 is an example of a _____ number.

4) A _____ is a statement that two ratios are equal.

5) A percent changed to a fraction will have a denominator of _____.

6) Using the numbers “1” through “6” put the following “operations in algebraic problem solving” in the proper order:
(12 pts.)

_____ Evaluate all exponents and roots.
_____ Evaluate all divisions.
_____ Evaluate all multiplications.
_____ Evaluate data within parentheses or brackets.
_____ Evaluate all subtractions.
_____ Evaluate all additions.

Perform each of the indicated operations:
(5 pts. each)

7) $(5/16) \div (1/3) =$

8) $(7/8)(3/16) =$

9) $(16/28)(4/2)(1/5) =$

10) $(6/18) + (5/9) =$

11) $-7 \div (5/9) =$

12) $(14/9) + (-3/4) =$

13) $(3/7) + (4/-14) - (4/28) =$

14) $\left(\dfrac{5}{1/3}\right) + (17/4) - (2/5) =$

15) 60% of 95 =

16) 16 is what percent of 128?

17) Which fraction is the largest $7/\sqrt{3}$ or $78/20$? (circle one)

18) The reciprocal of $\left(\dfrac{7}{-1/2}\right) =$

For the following two questions, $x = \sqrt{4}$, $y = 3$, $z = -2$
(9 pts. each)

19) $\dfrac{3x}{z} - \dfrac{xy}{4} + \dfrac{(xz)^2}{1} =$

20) $2x^3 + 6y - z^2 x =$