

Assignment Day 1

Problem Set 1: Basic Calculations

1. Calculate the sum of the following numbers: $145+289+356+421$ $145 + 289 + 356 + 421$.
2. Solve the equation $3x+5=17$ $3x + 5 = 17$.
3. Find x in the equation $x^2-16=0$ $x^2 - 16 = 0$.

Problem Set 2: Fractions and Decimals

1. Simplify the fraction $\frac{56}{84}$.
2. Convert the decimal 0.75 into a fraction.
3. Convert the fraction $\frac{5}{8}$ into a decimal.

Problem Set 3: Basic Geometry

1. Calculate the area of a rectangle with a length of 12 cm and a width of 8 cm.
2. Find the circumference of a circle with a radius of 7 cm. (Use $\pi=3.14$)
3. A triangle has side lengths of 6 cm, 8 cm, and 10 cm. Determine if this triangle is a right triangle.

Problem Set 4: Ratios and Proportions

1. In a class, the ratio of boys to girls is 3:2. If there are 30 students in the class, how many are boys and how many are girls?
2. A person mixes lemonade with a ratio of 1 part lemon juice to 5 parts water. How many liters of lemon juice and water are needed to make 3 liters of lemonade?
3. If a is directly proportional to b , and $b=12$ when $a=24$, find b when $a=36$.