**ASSINGMENT**

**STUDENT NAME**

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**EXPRESS THE RATIO 12:16 IN ITS SIMPLEST FORM.**

**ANSWER: 12:16 = 3:4 (DIVIDE BOTH TERMS BY 4)**

**2. DIVIDE $120 IN THE RATIO 2:3.**

**ANSWER: TOTAL PARTS = 2 + 3 = 5**

**2 PARTS = (2/5) × 120 = $48**

**3 PARTS = (3/5) × 120 = $72**

**3. THE RATIO OF CATS TO DOGS IN A PET SHOP IS 4:7. IF THERE ARE 28 DOGS, HOW MANY CATS ARE THERE?**

**ANSWER: 4/7 = X/28 → X = (4 × 28) / 7 = 16 CATS**

**4. IF A PERSON EARNS $240 FOR WORKING 8 HOURS, WHAT IS THE RATE OF PAY PER HOUR?**

**ANSWER: $240 ÷ 8 = $30 PER HOUR**

**5. ARE THE RATIOS 6:9 AND 8:12 PROPORTIONAL?**

**ANSWER: 6/9 = 2/3, 8/12 = 2/3 → YES, THEY ARE PROPORTIONAL**

**6. IF 3 SHIRTS COST $45, HOW MUCH WOULD 5 SHIRTS COST AT THE SAME RATE?**

**ANSWER: 1 SHIRT = $45 ÷ 3 = $15**

**5 SHIRTS = 5 × $15 = $75**

**7. IF 5 PENS COST $10, HOW MUCH DO 12 PENS COST?**

**ANSWER: 1 PEN = $10 ÷ 5 = $2**

**12 PENS = 12 × $2 = $248. A CLASS HAS 18 BOYS AND 12 GIRLS. WHAT IS THE RATIO OF BOYS TO THE TOTAL NUMBER OF STUDENT**

**TANSWER: 0.6X = 180 → X = 180 ÷ 0.6 = 300**

**3. FIND THE SIMPLE INTEREST ON $1,200 AT A RATE OF 5% PER ANNUM FOR 3 YEARS.**

**ANSWER: SI = PRT/100 = (1200 × 5 × 3) / 100 = $180**

**14. A SUM OF $2,000 IS INVESTED AT 10% PER ANNUM FOR 3 YEARS COMPOUNDED ANNUALLY. FIND THE TOTAL AMOUNT.**

**ANSWER: A = P(1 + R)^T = 2000 × (1.10)^3 = 2000 × 1.331 = $2662**

**15. A LOAN OF $2,000 IS GIVEN FOR 2 YEARS AT A RATE OF 6% PER ANNUM. WHAT IS THE TOTAL AMOUNT TO BE REPAID AT THE END OF THE PERIOD?**

**ANSWER (SIMPLE INTEREST): SI = (2000 × 6 × 2)/100 = $240**

**TOTAL = 2000 + 240 = $2240**

**END**