## **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 \text{ PARTS} = (2/5) \times 120 = $48$ 

 $3 \text{ PARTS} = (3/5) \times 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?  $X = (4 \times 28) / 7 = 16$  CATS

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

**ANSWER:**  $$240 \div 8 = $30 \text{ PER HOUR}$ 

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 =  $\$45 \div 3 = \$15$ 

 $5 \text{ SHIRTS} = 5 \times \$15 = \$75$ 

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

**ANSWER:**  $1 \text{ PEN} = \$10 \div 5 = \$2$ 

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

TANSWER: 0.6X = 180?  $X = 180 \div 0.6 = 300$ 

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

**ANSWER:**  $SI = PRT/100 = (1200 \times 5 \times 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:  $A = P(1 + R)^T = 2000 \times (1.10)^3 = 2000 \times 1.331 = 2662$ 

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):  $SI = (2000 \times 6 \times 2)/100 = \$240$ 

TOTAL = 2000 + 240 = \$2240

**END**