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**FACULTY: SOCIAL WORK -Online**

**ID: DIP/25/433**

1. 12​/4=3

16/4=4

**Simplified ratio: 3:4**

1. 2+3=5

120/5=24

Part one:24x2=48

Part two: 24x3=78

**Result:**

**$48** and **$72**

1. Set up the ratio

Cats : Dogs = 4 : 7  
Dogs = 28

Step 2: Find the value of one part

28/7​=4 per part

Step 3: Multiply to find the number of cats

4×4=16

**There are 16 cats**.

1. 240/8=30

**Rate of pay:** **$30 per hour**

1. **6:9** → Divide both by 3 →2:3

**8:12** → Divide both by 4 →2:3

Both simplify to **2:3**, so they **are proportional**

**Yes, 6:9 and 8:12 are proportional**

1. Find the cost per shirt

45/3=15

Multiply by 5

5x15=75

**Cost of 5 shirts:** **$75**

1. Cost per pen = $10 ÷ 5 = $2

Cost of 12 pens = 12 × $2 = **$24**

1. Total students = 18 + 12 = 30

Ratio of boys to total = 18:30 = **3:5**

1. 25% of 480 = 0.25 × 480 = **120**
2. Let original price be x

After 20% discount: x-0.2x=0.8x=150

X=150/0.8=**$187.5**

1. Commission = 5% of $2,000 = 0.05 × 2000 = **$100**
2. Let the number be x

60% of x =180 →0.6x=180

x=180÷0.60=**300**

1. SI=P×R×T÷100=1200×5×3÷100= **$180**
2. Formula: A=P(1+r)t=2000

2000(1+0.10)3

A= 2000×1.1\*3

=2000×1.331=**$2,662**

1. SI = 2000×6×2÷100= 240

Total Repayment=Principal+ Interest=2000+240= **$2240**