

12:

16 in simplest form:

$$12:16 = \mathbf{3:4}$$

Divide \$120 in the ratio 2:3:

$$\text{Total parts} = 2 + 3 = 5$$

$$\frac{2}{5} *$$

$$120 =$$

$$\mathbf{48}$$

$$\frac{3}{5} * 120 =$$

$$\mathbf{72}$$

Cats to dogs = 4:7, dogs = 28:

If 7 parts = 28, then 1 part = 4

$$\text{Cats (4 parts)} = 4 \times 4 = \mathbf{16 \text{ cats}}$$

\$240 for 8 hours ? Rate per hour:

$$\$240 \div 8 = \mathbf{\$30/\text{hour}}$$

Are 6:9 and 8:12 proportional?

$$6/9 = 2/3, \quad 8/12 = \mathbf{2/3}$$

$$3 \text{ shirts} = \$45$$

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5 shirts?

$$1 \text{ shirt} = \$15 \quad 5 \times 15 = \mathbf{\$75}$$

$$5 \text{ pens} = \$10$$

12 pens?

$$1 \text{ pen} = \$2 \quad 12 \times 2 = \mathbf{\$24}$$

18 boys, 12 girls

$$\text{total} = 30$$

$$\text{Ratio boys to total} = 18:30 = \mathbf{3:5}$$

$$25\% \text{ of } 480 = (25/100) \times 480 =$$

$$\mathbf{120}$$

\$150 after 20% discount

Original price?

$$\text{original} = \mathbf{\$187.50}$$

$$5\% \text{ commission on } \$2,000 = (5/100) \times 2000 = \$$$

$$\mathbf{100}$$

60% of a number = 180 find numbe

r

Simple interest: \$1,200 at 5% for 3 years

$$SI = (P \times R \times T) / 100 = (1200 \times 5 \times 3) / 100 = \mathbf{\$180}$$

Compound interest: \$2,000 at 10% for 3 years

$$= \mathbf{600}$$

Loan: \$2,000 for 2 years at 6% simple interest

$$SI = (2000 \times 6 \times 2) / 100 = \mathbf{\$240}$$

$$\text{Total} = 2000 + 240 = \mathbf{\$2,240}$$