

Real World Applications for Proportions / Percentages (C)

(A Ratio is a comparison of two numbers: 2 to 3 or 2:3)

(A Proportion is a statement of two equal ratios! 3 to 4 = 6 to 8)

(**Law** : Product of Outside Numbers **equals** Product of Inside Numbers)

(A Percent is a ratio of a Number to 100! 75% equals 75 to 100)

(A Percent changed to a Proportion: 25% of 8 is 2 25 to 100 = 2 to 8)

(**Remember**: **Is** number equals Inside & **Of** number equals Outside)

1. What percent of 40 Dollars, an investment, is 70 Dollars? Good investment!
A Percent is a ratio of a Number to 100!

$X\%$ of 40 is 70 P to 100 = 70 to 40 $40P = 7000$ $P = 175$ Check!

2. Jane & Pete created posters for a ball game with a ratio of 5 to 4.
Jane made 10 posters. How many did Pete make?

5 to $4 = 10$ to P $5P = 40$ $P = 8$ Check!

3. What percent of the number twenty-four is 6? These numbers are good friends!
A Percent is a ratio of a Number to 100!

$X\%$ of 24 is 6 X to 100 = 6 to 24 $24X = 600$ $X = 25$ Check!

4. A recipe for Chocolate & Raisins cookies has a ratio of Cs to Rs at 3 to 4.
If 12 Raisins are in the cookies then how many Chocolates?

3 to $4 = C$ to 12 $36 = 4C$ $9 = C$ Check!

5. (50%) of twelve Beautiful Yellow Bananas is how many?
Yummy Yellow Bananas! A Percent is a ratio of a Number to 100!

50% of 12 is B 50 to $100 = B$ to 12 $600 = 100B$ $6 = B$ Check!

6. Tom & Mary went fishing and they caught a ratio of 7 to 5.
Tom is a better fisher! Mary caught 15 fish. How many did Tom catch?

7 to $5 = T$ to 15 $95 = 5T$ $19 = T$ Check!

7. (75%) of 24 ounces of Orange Drink is water. Orange Drink is good!
How many ounces is water?

75% of 24 is W 75 to $100 = W$ to 24 $1800 = 100W$ $18 = W$ Check!

8. An Elementary Class of students has a ratio of Boys to Girls at 2 to 3.
The class has 10 Boys. How many Girls in class?

2 to $3 = 10$ to G $2G = 30$ $G = 15$ Check!

Real World Applications for Proportions / Percentages (D)

(A Ratio is a comparison of two numbers: 3 to 4 or 3:4)

(A Proportion is a statement of two equal ratios! 2 to 3 = 4 to 6)

(**Law**: Product of Outside Numbers **equals** Product of Inside Numbers)

(A Percent is a ratio of a Number to 100! 25% equals 25 to 100)

(A Percent changed to a Proportion: 75% of 8 is 6 75 to 100 = 6 to 8)

(**Remember**: **Is** number equals Inside & **Of** number equals Outside)

1. (50%) of twenty-four Beautiful Red Apples is how many?
I really like Red Apples! A Percent is a ratio of a Number to 100!

50% of 24 is A 50 to $100 = A$ to 24 $1200 = 100A$ $A = 12$ Check!

2. Kathy & Jerry created prizes for a class activity with a ratio of 7 to 3.
Kathy made 14 posters. How many did Jerry make?

7 to $3 = 14$ to J $7J = 42$ $J = 6$ Check!

3. What percent of 60 Dollars, an investment, is 90 Dollars? Good investment!
A Percent is a ratio of a Number to 100!

(P)% of 60 is 90 P to 100 = 90 to 60 $60P = 9000$ $P = 150$ Check!

4. An MS Class of students has a ratio of Boys to Girls which is 3 to 5.
The class has 6 Boys. How many Girls in class?

3 to $5 = 6$ to G $3G = 30$ $G = 10$ Check!

5. What percent of the number thirty-two is 8? These numbers are good friends!
A Percent is a ratio of a Number to 100!

(P)% of 32 is 8 P to 100 = 8 to 32 $32P = 800$ $P = 25$ Check!

6. Mike & Beth went fishing and they caught a ratio of 4 to 5 fish.
Beth caught more and she caught 10 fish. How many did Mike catch?

4 to $5 = M$ to 10 $40 = 5M$ $8 = M$ Check!

7. (75%) of 32 ounces Skim Milk is water. Fat Free Skim Milk is good!
How many ounces is water?

75% of 32 is W 75 to $100 = W$ to 32 $2400 = 100W$ $24 = W$ Check!

8. A recipe for Cherry & Nut cookies has a ratio of Cs to Ns being 3 to 2.
If 6 Nuts are in the cookies then how many Cherries?

3 to $2 = C$ to 6 $18 = 2C$ $9 = C$ Check!