

Achieved Number Practice #3

1. Two fencing contractors are paid \$840 for a job. Tyler put up 800 metres and Bradley did 700 metres. If they split the money based on how much they each did, calculate what each gets.
2. A recipe for apple crumble uses 250 grams of flour and 150 grams of butter. The recipe will serve 8 people. If a restaurant wants to make apple crumble for 20 people, how much flour and butter do they need?
3. A land agent sold 96 properties in one year. The next year he sold 12.5% fewer properties. How many properties did he sell that year?
4. In a batch of 485 car parts which were manufactured, 49 were found to be faulty. What % of car parts in the batch were not faulty?
5. A girl bought a dress for \$75. She put it on lay-by and paid $\frac{1}{5}$ of the price as a deposit. How much deposit did she pay?
6. In the drama contest $\frac{1}{4}$ of the marks are awarded for choice of material and $\frac{1}{2}$ of the marks are awarded for acting. What fraction of the total marks are awarded for choice of material and acting?
7. A Labrador dog breeder bred golden and black dogs. The ratio of golden to black dogs bred over 3 years was 5 : 3. If there were 240 dogs bred in this time, how many of each colour were bred?
8. A woman on a salary of \$42,500 got a pay increase of 8%. What is her new salary?
9. A recipe uses: 2 egg yolks, 2 tablespoons mustard, a dash of salt and pepper, a squirt of lemon juice and $1\frac{1}{2}$ cups oil to make 400 grams of mayonnaise. What do you need to make a kilogram of mayonnaise?
10. A jersey is reduced by \$20 in a sale to \$60. What % reduction is this?
11. A scout group raised a total of \$960 in a year. Half of the money was used to buy equipment for the group. Of this money for equipment one third was used on camping gear. What fraction was used to buy camping gear?
12. Of 240 residential building permits 72 were for houses and the rest for flats. Find the ratio of house permits to flat permits.
13. Anne eats half of a pizza and Geoffrey eats one third of the pizza. What fraction of the pizza is left?
14. If gold costs \$72.50 per gram, how much gold do you get for \$1000?
15. If a company reports increasing annual profits by 30% to 5.6 million, what was the profit last year?

Answers: Achieved Number Practice #3

1. Tyler did 800 out of 1500 total = $\frac{800}{1500}$
 $\frac{800}{1500} \times 840 = 448$, leaving 392 **Tyler is paid \$448, Bradley is paid \$392**
2. $20 \div 8 = 2.5 \times$ is the multiplier
 $2.5 \times 250 = 625$. $2.5 \times 150 = 375$ **625 grams of flour and 375 g of butter**
3. 12.5% of 96 = $\frac{12.5}{100} \times 96 = 12$ less.
Take those 12 off the original 96 **84 properties**
4. $485 - 49 = 436$ not faulty
 $\frac{436}{485} = 0.898969$. $\times 100$ to convert to % = **89.90 %**
5. $\frac{1}{5}$ of \$75 = $\frac{1}{5} \times 75 =$ **\$15**
6. $\frac{1}{4} + \frac{1}{2} =$ **$\frac{3}{4}$**
7. $5 + 3 = 8$ parts. Each part is = $240 \div 8 = 30$.
Golden = 5×30 : Black = 3×30 **150 golden and 90 black**
8. $\frac{8}{100} \times \$42,500 = \$3,400$
Add that on to original \$42,500 **\$45,900**
9. 1 kg = 1000 grams. Each mix makes 400 g, so we need $1000 \div 400 = 2.5$ mixes.
Multiplying everything by 2.5 we get
5 egg yolks, 2½ squirts lemon, 5 tblsp mustard, 3¾ cups oil, salt, pepper
10. $\frac{\text{change}}{\text{start total}} = \frac{20}{(20 + 60)} = 0.25$
 $\times 100$ to convert to a percentage **25 %**
11. $\frac{1}{3}$ of $\frac{1}{2} =$ **$\frac{1}{6}$**
12. House : Flats = 72 : 168 **3 : 7**
13. $1 - \frac{1}{2} - \frac{1}{3} =$ **$\frac{1}{6}$**
14. $\$72.50 = 1$ gram, from gram to \$ we $\times 72.5$, so from \$ to gram we $\div 72.5$
 $\$1000 \div 72.5 =$ **13.8 grams**
15. $\frac{130}{100} S = 5.6M$, so $S = 5.6M \div \frac{130}{100} =$ **4.3Mill**