

Answer the following questions.

1	Find the simple interest on \$500 for 3 years at a rate of 8.5% p.a.	
2	If 9% of a number is 162, find that number.	
3	Anna bought a pack of pencils for \$5.00 and sold for \$8.00. What is the percentage gain?	
4	There are 50 dogs in a kennel and 20% are sick. a) Calculate the number of sick dogs b) Calculate the number of healthy dogs.	
5	I bought a land for \$400,000 and now its value has increased by 6%. Calculate the new value of the land.	
6	If 20% of a number is 38, find the number.	
7	Add 12% of \$90 to 25% of \$150	
8	Find 12% of 15 kg. Write the answer in gram.	
9	Increase \$700 by 9% and then decrease the answer by 9%	
10	David bought a refrigerator for \$5600, which is 25% of his total savings in his bank account. Find his savings in the bank before buying the refrigerator.	
11	Find the simple interest on \$1200 for 2 years at a rate of $7\frac{1}{4}\%$ p.a.	
12	Out of 90 people in a street, only 10 have cats. What percentage of the people have cats?	
13	If 15% of a number is 60, find the number.	
14	Adam's weekly income is \$1500. He pays 20% of his weekly income in tax. a) Find his total weekly tax b) How much did he get after deducting the tax?	
15	Ramu got 4.5% increase in salary and got \$500 as his weekly pay. Calculate his weekly pay before the pay rise (old pay)?	

Answer Key:

1  $I = Pnr$   
 $I = 500 * 3 * (8.5/100)$   
 $I = \$127.5$

2  $(9/100) * x = 162$   
 $x = 162 * (100/9)$   
 $x = 1800$

3 Percentage Gain =  
 $\left( \frac{\text{final} - \text{initial}}{\text{initial}} \right) \times 100$   
 $= \frac{(8-5)}{5} \times 100$   
 $= 60\%$

4  $(20/100) * 50 = 10$   
 a) 10  
 b)  $50 - 10 = 40$

5  $= (6/100) * 400,000 = \$24,000$   
 $\$400,000 + \$24,000 = \$424,000$

6  $= (20/100) * x = 38$   
 $x = 38 * (100/20)$   
 $x = 190$

7 12% of \$90 =  $(12/100) * 90 = \$10.8$   
 25% of \$150 =  $(25/100) * 150 = \$37.5$   
 $\$10.8 + \$37.5 = \$48.3$

8  $= (12/100) * (15 * 1000)$   
 $= 1800 \text{ gram}$

9  $(9/100) * 700 = 63$   
 $700 + 63 = 763$   
 $(9/100) * 763 = 68.67$

$763 - 68.67 = 694.33$   
 $\$694.33$

10  $(25/100) * x = 5600$   
 $x = 5600 * (100/25)$   
 $= \$22,400$

11  $I = Pnr$   
 $I = 1200 * 2 * (7.25/100)$   
 $I = \$174$

12  $= \left( \frac{10}{90} \right) \times 100$   
 $= 11\frac{1}{9}\%$

13  $(15/100) * x = 60$   
 $x = 60 * (100/15)$   
 $x = 400$

14 a) \$300  
 b) \$1200

15 Old pay =  $x$   
 $x + (4.5/100) * x = 500$   
 Taking  $x$  out,  
 $x(1 + 0.045) = 500$   
 $x = 500/1.045$   
 $x = 478.47$