

## Achieved Number Practice #1

1. If I buy 5 pencils at 25 cents each, and a two rubbers at \$1.20, how much change do I have from a \$20 note?
2. 1 inch = 25.4 mm. How many inches is a 250 mm ruler?
3. If Ben normally sleeps 7 hours a night, what percentage of each (24 hour) day does he sleep?
4. Andrew earns \$44,000 a year. He works really hard and his boss gives him an 8% bonus. How much is the bonus?
5. Daniel works for 12 hours and Connor for 9 hours at the same hourly rate. If Daniel gets paid \$198, how much does Connor get paid?
6. Plaster of Paris costs \$6.80 for a 2½ kg bag at Home Depot, and \$5.20 for a 2 kg bag at Surprise Hardware. Which offers the better deal?
7. A store is offering "20% discount" on all goods. Edward wants a jacket that normally costs \$180? How much must Edward pay for the jacket?
8. Sarmad has 200,000 Iraqi Dinars. If the exchange rate is 1.00 IQD = 0.001133 NZD, how much will Sarmad get in NZ dollars?
9. Wairere is advised to drink 125 ml of energy drink for every 15 minutes of strenuous exercise. If he has a 500ml bottle of drink, how much exercise is this enough for?
10. Myxomatosis is a disease of rabbits. If a new strain kills 290 of the original population of 310 rabbits, what percentage are killed?
11. Liam is paid 12% commission on all his sales. If he sells \$23,000 worth of material, how much will he get?
12. Morgan Enterprises promises to donate \$2 extra for every \$5 raised by a charity. If the charity raises \$24,000, how much extra will Morgan Enterprises donate?
13. Zak puts \$4,500 into a term deposit bank account that pays 8% per annum. How much does he have at the end of the year?
14. Thomas pays for \$15 of a \$20 lotto ticket. It wins \$65,000. What is his share of the winnings?
15. 1 litre = 0.2641 US gallons. How many litres is a 44 gallon drum?

## Answers: Achieved Number Practice #1

- $5 \times 0.25 + 2 \times 1.20 = \$3.65$   
 $20 - 3.65 = 16.35$  **I get \$16.35 change**
- $250 \div 25.4 = 9.8425$  **The ruler is 9.84 inches long**
- $\frac{7}{24} = 0.291666 = 29.16666\%$  **Ben sleeps 29.2 % of the day**
- $\frac{8}{100} \times 44000 = 3,520$  **Andrew's bonus is \$3,520**
- Daniel gets paid  $198 \div 12 = 16.50$   
 $9 \times 16.50 = 148.5$  **Connor gets paid \$148.50**  
( or Connor gets  $\frac{9}{12}$  of Daniel.  $\frac{9}{12} \times 198 = 148.5$  )
- Home Depot  $6.8 \div 2\frac{1}{2} = 2.72$   
Surprise  $5.2 \div 2 = \$2.60$  **Surprise is cheaper (12 cents a kg)**
- $180 - \frac{20}{100} \times 180 = 144$  **Edward must pay \$144**
- $200\ 000 \times 0.001133 = 266.642$  **Sarmad will get \$266.60**
- $500 \div 125 = 4$ , so there are four lots of 125 mL in a 500 mL bottle  
 $4 \times 15 = 60$  **It is enough for 60 minutes**
- $\frac{290}{310} = 0.9354838 = 93.54838\%$  **It kills 93.5% of the rabbits**
- $\frac{12}{100} \times 23000 = 2,760$  **Liam is paid \$2,760 in commission**
- $24000 \div 5 = 4800$ , and for every five they give two, so  
 $4800 \times 2 = 9,600$  **They will donate \$9,600**
- $\frac{8}{100} \times 4500 + 4500 = 4,860$  **Zak will have \$4,860**
- His share is 15 out of 20 =  $\frac{15}{20}$   
 $\frac{15}{20} \times 65\ 000 = 48\ 750$  **Thomas will get \$48,750**
- $44 \div 0.264 = 166.6035$  **A 44 gallon drum is 166.6 litres**