Questions:

1) Change the following percent to the equivalent fractions:
   a) 75%  
   b) 33%  
   c) 125%

2) Change the following decimals to the equivalent fractions:
   a) 0.40  
   b) 0.375  
   c) 1.5

3) Change the following decimals to the equivalent percent:
   a) 0.005  
   b) 2.50  
   c) 0.81

4) A textbook that normally sells for $90.00 is on sale for 1/3 off. The cashier rings in $63.00. Is that the correct amount? What is the correct sale price?

5) Tiffany was earning $7.50 per hour at her part-time job in a library. In January 2000, she received a 2.7% raise. What is her new hourly wage?

6) A certain airline, known for having trouble with lost baggage, advertises that lost baggage claims had decreased by 110%. Is this a reasonable statement to make? Explain.

7) You bought twenty shares in a mutual fund company at $15 in January 2011. In June 2011, the shares had increased in their price by 20%. However, by January 2012, the shares had decreased by 20% from the price in June. What was the value of the shares in January 2012?

8) A pair of pants regularly priced at $84.99 is on sale at 25% off. Estimate and calculate the sale price.

9) You are interested in taking a trip to the US. The trip is advertised at $1395 US. What is the cost in Australian dollars, if $1 US = $1.57 AUD?

10) Last year, Adelaide received 723 mm of precipitation. How many centimetres is this? How many inches is this equivalent to? (1 inch = 25.4 mm)

11) You are in charge of a new childcare centre. You have a budget of $140 000 to be used as follows: salaries 55%, utilities 10%, rent 12%, administration and supplies 16%. The remainder is for miscellaneous expenses. How much is spent on salaries, and how much is spent on miscellaneous expenses?

12) Kathy bought 5 cases of juice boxes at a recent sale at a supermarket for her day care centre, which has 15 children. Each case contains 10 sleeves and each sleeve contains 3 juice boxes.
   a) How long will the supply of juice boxes last if each child has one juice box per day?
   b) How long will the supply of juice boxes last if each child has only one box on pizza day, which occurs once a week?

Check your answers over the page.
Answers

1)  a) $\frac{3}{4}$   b) $\frac{1}{3}$   c) $1 \frac{1}{4}$
2)  a) $\frac{2}{5}$   b) $\frac{3}{8}$   c) $1 \frac{1}{2}$
3)  a) 0.5%   b) 250%   c) 81%
4)  No - 1/3 is not 30%. The correct sale price is $60
5)  New wage is $7.70 increase of approx. $0.20
6)  No - cannot have decreases more than 100%
7)  June- $18
       January 2000 - $14.40
8)  Estimate: $64 - Actual: $63.74
9)  $2190.15 AUD
10) 28.46 inches
11) Salaries - $77 000 miscellaneous - $9800
12)  a) 2 weeks   b) 10 weeks