**Activity Percentages**

1. Complete the table

|  |  |  |
| --- | --- | --- |
| **Fraction** | **Decimal** | **Percentage** |
| $$\frac{3}{10}$$ |  |  |
|  | 0.24 |  |
|  |  | 6% |
|  | 0.7 |  |
| $$\frac{4}{5}$$ |  |  |

1. In 2014 a woman earns $1750 each month with her business. In 2015 she does even better and earns $2100 each month. Calculate the percentage increase of her earnings.
2. A musician with not a lot of money waits for the Sale period to buy a new guitar. When the Sale periods finally arrives the musician’s guitar shop offers all instruments with a 30% discount. The musician buys a brand new guitar for 825 Euro. What would the guitar normally have cost? Give your answer to the nearest Euro.
3. Mira has 225 stamps and Bill has 180 stamps. Calculate Bill’s stamps as a percentage to Mira’s stamps.
4. John goes to Khan el Khalili, the beautiful souk (market) in Cairo. He wants to buy a lamp costing 535 LE but thinks it is too expensive. After hours of negotiating and drinking tea with the shopkeeper John gets a 69% discount on the lamp. Calculate to the nearest cent how much John pays the shopkeeper for the lamp.
5. The average time each day of standing in a traffic jam in 2012 was 1.25 hour. In 2015 the average time each day of standing in a traffic jam was 45 minutes. Calculate the percentage decrease of standing in a traffic jam.
6. Jane gets 15% discount on a kilo banana’s and has to pay $2.50. How much would she have had to pay to the nearest cent if she did not get any discount?
7. Marie buys some books worth $45. Because she is a regular client at the shop she receives 12% discount. How much, to the nearest dollar, does Marie have to pay for the books?
8. Ahmed sold 79 boxes of cookies for a local charity while Mahmoud sold 44 boxes. Calculate the amount of boxes Ahmed sold as a percentage to those of Mahmoud. Give your answer correct to three significant figures.
9. Mr John is an amazing maths teacher and his school therefore gives him a 15% pay rise. Mr John’s will now earn $3400 in 2015. How much did he earn in 2014? Give your answer to the nearest dollar.

**Answer key**

|  |  |  |
| --- | --- | --- |
| **Fraction** | **Decimal** | **Percentage** |
| $$\frac{3}{10}$$ | 0.3 | 30% |
| $$\frac{6}{25}$$ | 0.24 | 24% |
| $$\frac{3}{50}$$ | 0.06 | 6% |
| $$\frac{7}{10}$$ | 0.7 | 70% |
| $$\frac{4}{5}$$ | 0.8 | 80% |

2) 20%

3) 1179 Euro

4) 80%

5) 165.85 LE

6) 40%

7) $2.94

8) $40

9) 180%

10) $2957