

## MATH 020 Support 2: Applications of Percent

Changing a Percent to a Decimal: Move the decimal two places left and remove the % symbol.

Changing a Decimal to a Percent: Move the decimal two places right and write the % symbol.

### Converting Time

360 or 365 days in one year

52 weeks in one year

12 months in one year

### Problems

1. Write the percent as a decimal.

a) 25%	b) 3.74%	c) 0.25%
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2. Write the decimal as a percent.

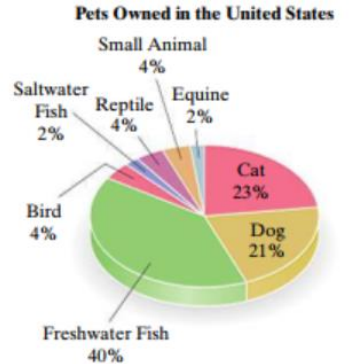
a) 0.045	b) 0.45	c) 4.5
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3. Convert the following into years.

a) 3 months	b) 6 months	c) 15 weeks
d) 8 months	e) 220 days	f) 30 months

4. The sales tax in Washington DC is 5.75%. Find the tax charged on a purchase of \$45.65.

5. The circle (pie) graph shows the breakdown of total pets owned in the U.S.



Source: American Pet Products Association

a) What percent of pets owned are cats or dogs?

b) What percent of pets are not birds?

c) Approximately 377 million pets are owned in the U.S. How many are cats?

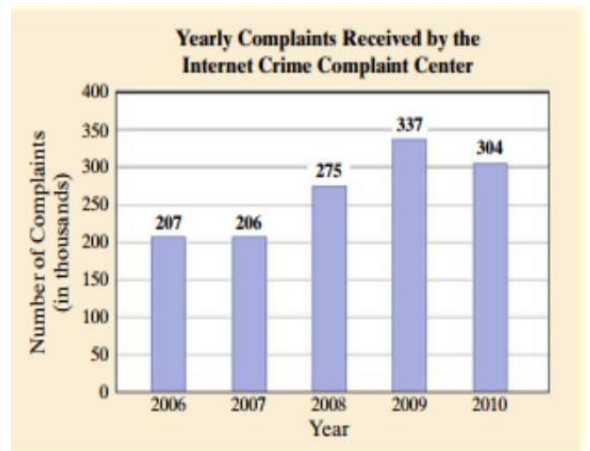
6. A used car dealership reduced the price of a certain car by 8%. The price of the car before the discount was \$22,000.

a) What is the discount amount?

b) What is the new price of the car?

7. Find the original price of a pair of shoes if the sale price is \$45 after a 20% discount.

8. The bar graph represents the yearly complaints received by the Internet Crime Complaint Center. Use the graph to find:



a) the percent increase from 2008 to 2009.

b) the percent decrease from 2009 to 2010.