Unit 4 – Ratio and Proportion Name: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Chapter Review

Place stars next to the topics you feel you need help understanding. Topics Include

|  |  |
| --- | --- |
| 1. Fractions, decimals and percent 2. Fractional percent 3. Finding the percent of a number 4. Sales Taxes and Discounts 5. Percent Increase and Decrease | 1. Proportion- Determine equivalent Ratios 2. Writing rates 3. Finding unit rates 4. Comparison shopping- Best buy 5. Percent bubble |

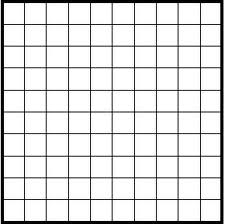
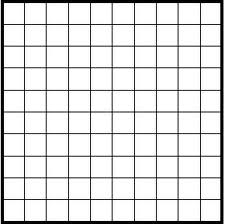
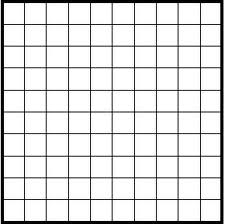
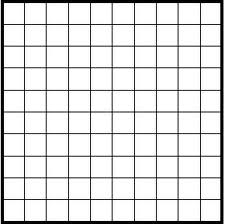
**Practice**

1. Complete the tables;

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
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| |  |  |  | | --- | --- | --- | | Fraction | Decimal | % | |  | 0.7 |  | | 1/5 |  |  | |  |  | 15.5% | |  | 2.3 |  | |  |  | 9 % | | |  |  |  | | --- | --- | --- | | Fraction | Decimal | % | |  | 0.85 |  | | 6/25 |  |  | |  |  | 175% | |  | 0.045 |  | |  |  | 45 % | |

1. Draw each of these fractional percent on the 100 grid and write each as a decimal and fraction.

6 % 50 % 150 2/3 %



1. Find ;

a) % of $60 b) 25.5% of 400kg c) 25% of $100 d) 17% of 40m e) 150% of 143g



1. a) 15% sales tax on one $430 television. What is the sales tax?

b) You want to buy the $108 CD Changer. If the sales tax is 6.5%, what is your after-tax total?

c) A sweater cost $ 67.99. The store is offering 30% off. What is the cost of the sweater?

1. a) A car was valued at $16 500 in 2012. Today, the value of the car is $12 705. What is the percent decrease?

b) A house was purchased for $150 000. 4 years later is was valued at $167 000. What is the percent increase of the house?

1. a) In the gym storage room, there are 7 basketballs, 10 volleyballs, 6 softballs, and 5 soccer balls. Express each comparison as a ratio in simplest terms.
   * Basketballs to softballs
   * Volleyballs to soccer balls
   * Volleyballs to softballs to total

b) Find the missing number in each proportion.

1. b) 3:? = 21 :56 c) 3:2 = ? : 12



d) e) 5:8 = 10:? f)



c) A recipe calls for 3 cups of juice to 5 cups of ice. How many cups of ice would you need if she used 15 cups of juice.

d) Supergrow plant food contains nitrogen and potassium in a ration of 3 to 4.

How much nitrogen would be in a bag that contains 20 g of potassium?

How many grams of nitrogen and potassium would be in a bag of fertilizer with a mass of 315g?

1. Write the following as rate;
2. Joe travels 30km in 60 mins
3. In 2 minute, Anna’s heart beats 106 times.

8.a) It took 15 minutes for Sue to ride skateboard a distance of 3 km. What is her average speed per hour?

b) Bernard earns $ 165 for an 8 hr workday. What does he earn per hour?

9. a) A 500 ml bottle of shampoo costs $5.49. A 300 ml bottle costs $3.60. Which is the better deal?

b) One brand of paper towel cost $1.79 for 90 sheets. Another brand costs $2.09 for 100 sheets. Which brand is the better deal?

10. a)

* 10% of how much is $50?
* 45% if 250g is how many grams?
* 165 of 405 is what percentage?

b) In a school election, Sarah ran for president and was elected with 564 votes. If she received 65% of the votes, how many people voted.

c) In grade 10, 37 out of 60 students attended the basketball game. In grade 11, 45 out of 70 attended the game. Which grade had a higher percentage of students at the game?

d) Suzie bought a pair of roller skates marked 40% off. They were originally $250. How much did she pay for them?