study guide for quiz 1

Find each unit rate. Round to the nearest hundredth if necessary.

1. $24 for 6 hours

1._____

2. $5.50 for 10 disks

2. _____

3. The costs of different bags of dog food are as shown.   Which bag of dog food costs the least per pound?

Size (lbs)	10	12	24	50
Price	$22.50	$26.40	$51.60	$112.50

3. _____

Simplify.

4. $\dfrac{\frac{3}{5}}{4}$

4. _____

5. $\dfrac{12}{\frac{3}{4}}$

5. _____

6. $\dfrac{\frac{9}{4}}{5}$

6. _____

7. A chicken can run at a top speed of 9 miles per hour. Find the top speed of a chicken in miles per minute. Round to the nearest tenth.

7. _____

Determine if the situations represent proportional relationships.
Then explain your reasoning.

8. **JOBS** The table shows the amount Ross earns for each lawn he mows.

Earnings ($)	52	91	143
Lawns (l)	4	7	11

8. _____

9. **SHAMPOO** The table shows the cost of shampoo at a discount store.

Cost ($)	2.95	4.50	6.05
Number of Bottles	1	2	3

9. _____

10. An outdoor swimming pool costs $8 per day to visit during the summer. There is also a $25 yearly registration fee. Is the total cost proportional to the total number of days visited?

10. _____

11. Adella can fill 27 glasses with 3 containers of soda. How many glasses can she fill with 5 containers of tea?

11. _____

12. At a certain middle school, there are 26 students per teacher in every homeroom. Is the total number of students proportional to the number of teachers?

12. _____