

P-7 Unit Rates
Algebra

Name _____ Per. _____

Finding unit Rates

When the denominator of a rate is 1, we call the rate a **unit rate**. We usually use the key word **per** or the division symbol / to indicate a unit rate. For example:

If a student earns \$8.50 per hour, it is the same as \$8.50/hour, and means \$8.50 for every 1 hour of work.

Find each unit rate. Round your answer to the nearest hundredth.

1. type 800 words in 12 minutes _____ words per minute	2. 192 students in 4 buses _____ in each bus
3. 357 miles in 5 hours _____ miles per hour	4. 8 ducks for \$23.60 \$_____ per duck
5. a 10-lb bag of cherries for \$33.49 _____ per lb	6. 12 chickens lay 30 eggs _____ eggs per chicken
7. Earn \$134 in 8 hours _____ per hour	8. 3 pizzas for \$19.99 _____ each
9. 3500 calories for 6 servings of pie _____ calories per serving	10. 351 chairs in 27 rows _____ chairs in each row
11. \$37.29 for 2 pairs of jeans. _____ each	12. \$37.29 for 2 pairs of ducks _____ per duck
13. 24 senior citizens in 12 RVs _____ in each RV	14. 7 penguins for \$188.88 _____ each

Which is the better buy?

15. A 12.5 oz bag of Doritos for \$3.79 or a 3 oz bag for \$1.00.

16. 12 bars of soap for \$10.00 or 5 bars of soap for \$4.00.

17. A box of 84 penguins for \$13,597 or a bag of 50 penguins for \$795.95.

18. 5 gallon bucket of paint for \$97.45 or a 1 gallon bucket of paint for 21.95.

19. 48oz big gulp for \$1.39 or a 32 oz coke for \$.89.

20. 50 head of cattle for \$24,500 or 37 head of cattle for \$18,870

Use each unit rate to find the total.

21. Caleb drives for 3 hours at 15 miles per hour. How far does he travel?
22. Larisa buys 5 hats at \$9.99 each. How much does she spend?
23. Meranda works for 7 hours at \$10.25 per hour. How much does she earn?
24. Luis writes a five page report with 250 words per page. How many words are in the report?
25. Richard owns 35 chickens and each one produces 3 eggs per day. How many eggs can he collect each day?

For each problem below find the unit rate, then use the unit rate to answer the question.

26. Jesus bought 3 pairs of jeans for \$71.40. How much would he need to pay for 8 pairs of jeans?

Unit rate \$_____per pair

Cost for 8 pairs _____

27. Morgan scored 41 points in 3 games. How many points would you expect him to make in an 11 game season.

Unit rate _____points/game

Points in 11 games_____

28. Andy drove 840 miles in 12 hours. How far could he drive in 3 hours?

Unit rate (speed) _____

Distance _____

29. Pira drives 825 miles to California. The trip takes him 17 hours. He uses 38 gallons of gas on the trip, which costs him \$125.

- Find his speed.
- Find his gas mileage.
- Find the unit price he paid for gas.