

Grade 6 Chapter 12 Lesson 9 Unit Rates

Answers

- A. Super Darts: 25¢ per play; Ball Toss: 30¢ per play.
B. Super Darts, Ball Toss, and Sponge Toss
C. Super Darts is the best bargain because it is the cheapest per play.
1. For example, the word unit stands for one. Since rate is the comparison of two quantities, then the unit rate is the comparison of a quantity to 1 quantity.
 2. For example, he could have, but it would have been much harder to figure out and you would end up with fractions of plays; in this case, it is easier to determine the rate for 1 play.
 3. For example, a unit rate is like a ratio because it is a comparison of two quantities, but different, because the quantities have different units of measure.
 4. a) 9 throws for \$3.00 is 3 throws for \$1.00; 2 throws for \$1.00; 2 throws for \$0.40 is \$0.20 for each throw or 5 throws for \$1.00; 75 cents for 3 throws is 25 cents for 1 throw or 4 throws for \$1.00.
b) 2 throws for \$1.00, 9 throws for \$3.00, 75¢ for 3 throws, 2 throws for 40¢
- 5. a) 1 battery for \$0.50 or 2 batteries for \$1
b) 1 battery for \$0.65
- c) 1 CD for \$4.50
d) 1 CD for \$4.00
6. a) rabbit – 200 beats per min; lion – 40 beats per min; shrew – 800 beats per min; elephant – 35 beats per min
b) 35 beats per min, 40 beats per min, 200 beats per min, 800 beats per min
 7. a) raisin – \$0.75 per cookie; oatmeal – \$0.90 per cookie; almond – \$0.50 per cookie; carob chip – \$1.00 per cookie
b) For example, the answer is a unit rate because they are the costs for 1 cookie.
c) The almond cookies are the least expensive.
 8. Jenna moved the fastest at 16 km/h; Alexa 4 km/h, Luke 5 km/h, Alex 10 km/h, Jenna 16 km/h.
 9. For example, if 200 g cost \$3.00, then for \$1.00, I can get 200 divided by 3 or about 67 g of chips. If 300 g costs \$4.00, then for \$1.00, I can get 300 divided by 4 or 75 g of chips. The 300 g bag of chips for \$4.00 is the better buy.