Rates and Percents

Lesson 6 Comparing Package Sizes

Standards 6.RP.A.3b

Learning target I can compare unit prices to find the better buy.

Materials Ratio tables, price labels, pencils, optional double number lines.

Lesson Flow 50 Minutes

0–5 Activate prior knowledge. Read the learning target. Ask students what they already know about comparing package sizes. Use a quick model or estimate to make their starting ideas visible.

5–17 Teach and model. Divide total cost by the number of items or units. Compare costs for exactly one of the same unit. A lower package price does not always give a lower unit price. Work through the two examples on the attached instruction page. Have students name the first step before showing it.

17–22 Guided practice. Revisit worked Example 2 with its solution covered. Students propose the next step and explain why it is valid; uncover and compare with the worked solution.

22–45 Independent classwork. Assign the attached 10 questions in order. Check items 1–3 for entry-level understanding, 4–6 for connected procedures, 7–8 for representation and explanation, and 9–10 for application or justification. Ask students to use the instruction-page notes area or extra grids for longer work.

45–50 Check understanding. Use classwork question 10 as an exit discussion: Pack A has 3 markers for $12; Pack B has 9 markers for $40.5. Find each unit price and the better buy. How much would 27 markers cost using each pack size? Compare the result with the answer key and ask a student to defend the method.

Support and Extension

Support Model item 1 together with the listed tools, then have students attempt item 2 independently. Watch rate units, reference wholes, and confusing percent with its decimal form.

Extension Ask students to solve a final item another way, draw a second representation, or create a related problem with a checked answer.

Next step Record which students can explain the target independently. Begin the next teaching session with a brief correction for any recurring error.

Name _____ Date _____

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Learning target I can compare unit prices to find the better buy.

Learn and Discuss

Divide total cost by the number of items or units. Compare costs for exactly one of the same unit. A lower package price does not always give a lower unit price.

Example 1 Pack A has 7 markers for $14; Pack B has 13 markers for $32.5. Find each unit price and the better buy.
Solution A $2/marker; B $2.5/marker; A is cheaper. Divide each price by its marker count; compare 2 with 2.5.
Example 2 Pack A has 6 markers for $12; Pack B has 8 markers for $20. Find each unit price and the better buy. How much would 48 markers cost using each pack size?
Solution A $2/marker; B $2.5/marker; A is cheaper; A $96, B $120. Divide each price by its marker count; compare 2 with 2.5.

Classwork Show Your Work

Complete the 10 problems on the following page. Refer to the examples, draw models, and check your results.

My Notes or Second Method

Lesson 6 Comparing Package Sizes

Name _____ Show calculations, models, and units.

1. Pack A has 7 markers for $21; Pack B has 13 markers for $45.5. Find each unit price and the better buy.

2. Pack A has 2 markers for $14; Pack B has 7 markers for $52.5. Find each unit price and the better buy.

3. Pack A has 3 markers for $12; Pack B has 8 markers for $36. Find each unit price and the better buy.

4. Pack A has 6 markers for $18; Pack B has 12 markers for $42. Find each unit price and the better buy.

5. Pack A has 4 markers for $6; Pack B has 7 markers for $14. Find each unit price and the better buy.

6. Pack A has 5 markers for $20; Pack B has 9 markers for $40.5. Find each unit price and the better buy.

7. Pack A has 3 markers for $4.5; Pack B has 9 markers for $18. Find each unit price and the better buy. How much would 27 markers cost using each pack size?

8. Pack A has 7 markers for $24.5; Pack B has 12 markers for $48. Find each unit price and the better buy. How much would 84 markers cost using each pack size?

9. Pack A has 3 markers for $9; Pack B has 6 markers for $21. Find each unit price and the better buy. How much would 18 markers cost using each pack size?

10. Pack A has 3 markers for $12; Pack B has 9 markers for $40.5. Find each unit price and the better buy. How much would 27 markers cost using each pack size?

Comparing Package Sizes

Rates and Percents

1. A $3/marker; B $3.5/marker; A is cheaper
Reasoning Divide each price by its marker count; compare 3 with 3.5.

2. A $7/marker; B $7.5/marker; A is cheaper
Reasoning Divide each price by its marker count; compare 7 with 7.5.

3. A $4/marker; B $4.5/marker; A is cheaper
Reasoning Divide each price by its marker count; compare 4 with 4.5.

4. A $3/marker; B $3.5/marker; A is cheaper
Reasoning Divide each price by its marker count; compare 3 with 3.5.

5. A $1.5/marker; B $2/marker; A is cheaper
Reasoning Divide each price by its marker count; compare 1.5 with 2.

6. A $4/marker; B $4.5/marker; A is cheaper
Reasoning Divide each price by its marker count; compare 4 with 4.5.

7. A $1.5/marker; B $2/marker; A is cheaper; A $40.5, B $54
Reasoning Divide each price by its marker count; compare 1.5 with 2.

8. A $3.5/marker; B $4/marker; A is cheaper; A $294, B $336
Reasoning Divide each price by its marker count; compare 3.5 with 4.

9. A $3/marker; B $3.5/marker; A is cheaper; A $54, B $63
Reasoning Divide each price by its marker count; compare 3 with 3.5.

10. A $4/marker; B $4.5/marker; A is cheaper; A $108, B $121.5
Reasoning Divide each price by its marker count; compare 4 with 4.5.