

Unit 3 Lesson 14: Solving Percentage Problems

1 Number Talk: Multiplication with Decimals (Warm up)

Student Task Statement

Find the products mentally.

$$6 \cdot (0.8) \cdot 2$$

$$(4.5) \cdot (0.6) \cdot 4$$

2 Coupons

Images for Launch



Student Task Statement

Han and Clare go shopping, and they each have a coupon. Answer each question and show your reasoning.

1. Han buys an item with a normal price of \$15, and uses a 10% off coupon. How much does he save by using the coupon?



2. Clare buys an item with a normal price of \$24, but saves \$6 by using a coupon. For what percentage off is this coupon?

3 Info Gap: Music Devices

Student Task Statement

Your teacher will give you either a *problem card* or a *data card*. Do not show or read your card to your partner.

If your teacher gives you the *problem card*:

1. Silently read your card and think about what information you need to be able to answer the question.
2. Ask your partner for the specific information that you need.
3. Explain how you are using the information to solve the problem.

Continue to ask questions until you have enough information to solve the problem.

4. Share the *problem card* and solve the problem independently.
5. Read the *data card* and discuss your reasoning.

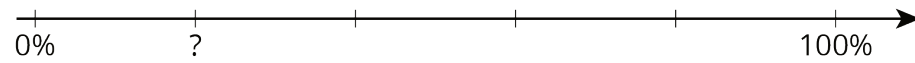
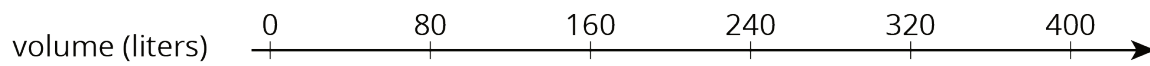
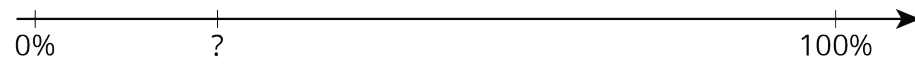
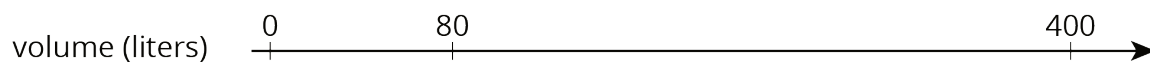
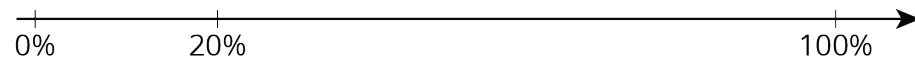
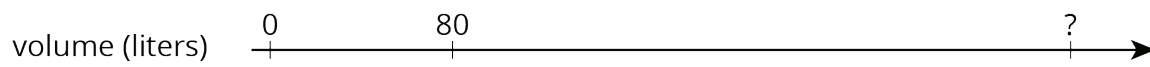
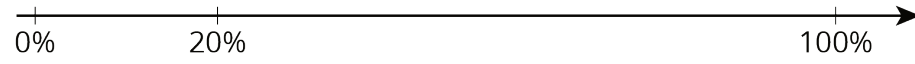
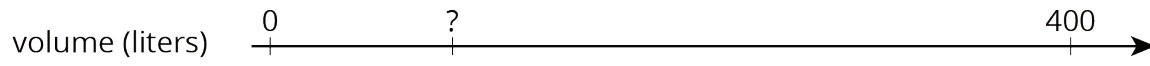
If your teacher gives you the *data card*:

1. Silently read your card.
2. Ask your partner “*What specific information do you need?*” and wait for them to *ask* for information.

If your partner asks for information that is not on the card, do not do the calculations for them. Tell them you don’t have that information.

3. Before sharing the information, ask “*Why do you need that information?*” Listen to your partner’s reasoning and ask clarifying questions.
4. Read the *problem card* and solve the problem independently.
5. Share the *data card* and discuss your reasoning.

Images for Activity Synthesis



volume (liters)	percentage
400	100
80	20

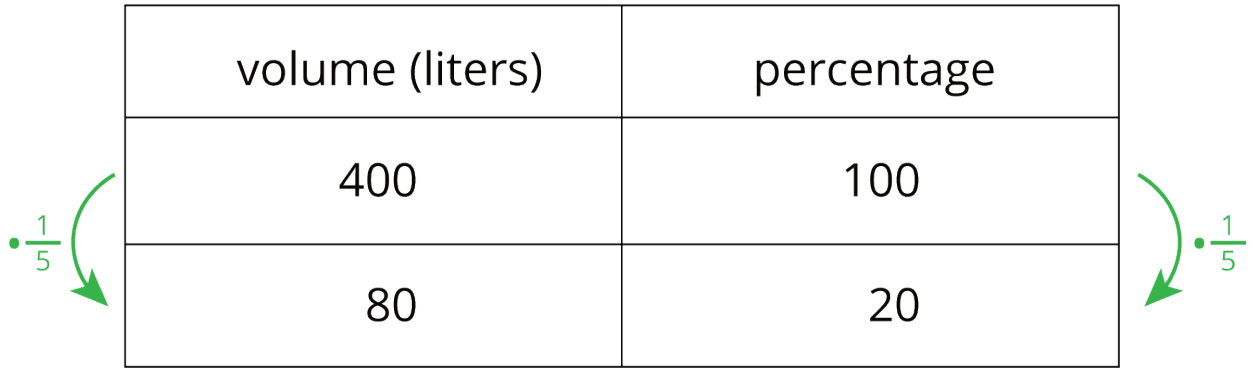


Diagram illustrating a table with two rows of data. The first row shows 400 liters and 100%. The second row shows 80 liters and 20%. Green arrows on the left and right sides indicate a scaling factor of $\frac{1}{5}$ applied to the values in the first row to reach the second row.