

Steps of Problem Solving

[illegible]

PRACTICE

Michael drove from his house to the chocolate factory in 3 hours. If we want to find his average speed, what piece of information is missing?

PRACTICE

A class is selling raffle tickets for \$8 each to raise money for a field trip. They sold 125 tickets. The goal was to raise \$1,000. How much money did the class raise? What piece of information was not necessary to solve the problem?



Shippee Shutterstock. (2023). A Roll of Old Paper Tickets with Numbers. [Photograph]. Pearson Asset Library.

TOPIC: PROBLEM SOLVING

EXAMPLE

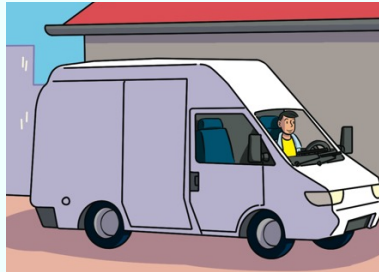
A group of six friends is renting a van for a weekend trip. They were considering two rental packages:

Package A:

- Flat rental fee of \$420
- Plus \$0.18 per mile driven

Package B:

- Flat rental fee of \$480
- No mileage charge



Beebe, Paul. Young Driver Driving a Van.
[Illustration]. Pearson Asset Library.

PROBLEM SOLVING STEPS

- 1) Understand
- 2) Plan
- 3) Execute
- 4) Check

The group expects to drive 350 miles in total. Which rental option is cheaper, and how much will each person pay under the cheaper option if the cost is split equally? Use the four steps of problem solving to answer the question.

EXAMPLE

A vending machine only accepts nickels, dimes, and quarters. A customer has 6 nickels, 4 dimes, and 2 quarters. Use the steps of problem solving to discover the number of different ways the customer can pay exactly 70 cents for a snack with the coins they have.



PROBLEM SOLVING STEPS

- 1) Understand
- 2) Plan
- 3) Execute
- 4) Check

TOPIC: PROBLEM SOLVING

EXAMPLE

A vendor sells two types of bracelets at a fair. The first design costs \$4, while the second design costs \$6. At the end of the day, the vendor made \$28 from bracelet sales. Based only on this information and using the four steps of problem solving, can you determine how many of each type of bracelet was sold?

PROBLEM SOLVING STEPS

- 1)** Understand
- 2)** Plan
- 3)** Execute
- 4)** Check

References:

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