PRACTICE 1: SAMPLE

Directions
Choose the best answer to each question.

A  Hannah and 3 of her friends had lunch at a restaurant. The total bill was $24.90. If they split the bill equally, which number sentence could be used to find how much each person owes?
   (A) $24.90 \times 4 = \underline{}$
   (B) $24.90 \div 4 = \underline{}$
   (C) $24.90 + 4 = \underline{}$
   (D) $24.90 - 4 = \underline{}$

B  Arjun bought 19 video games for $58.95 each. Which numbers give the best estimate of the total cost?
   (F) 10 \times $50
   (G) 20 \times $50
   (H) 10 \times $60
   (J) 20 \times $60

C  Carla’s family bought a bag of apples. They ate 15 apples in all. Each person ate the same number of apples. What else do you need to know to find out how many apples each person ate?
   (A) how many apples were in the bag
   (B) how much the apples cost
   (C) how many people are in Carla’s family
   (D) how many apples were left

HINT: Read each problem carefully.
HINT: Look for key words to solve each problem.
To answer question A, you need to decide whether you should add, subtract, multiply, or divide. Since Hannah and 3 friends want to split the bill equally, you should divide the total cost by 4. Answer B, $24.90 \div 4 = \square$, is correct.

Question B involves estimating. To find the best estimate of how much the video games cost, you need to round each number to the nearest ten. So if you round 19 to 20 and round $58.95 to $60, then the best estimate is $20 \times $60. Answer J is correct.

To answer question C, you must decide what information you will need to figure out how many apples each person ate. First, you can eliminate any answers that you know are wrong. Knowing how many apples were in the bag (answer A) will not help because you know that 15 apples were eaten. Knowing how much the apples cost (answer B) will not help. That leaves two possible answers. The problem says each person ate the same number of apples and the family ate a total of 15 apples, so you really don’t need to know how many apples were left (answer D). To find how many apples each person ate, you need to know how many people are in the family. Answer C is correct.

**REMINDE**RS: As you take the Practice Test, remember these hints.

✔ Read each problem carefully to make sure you know what it is asking for.

✔ Look for key words and numbers to help you solve the problem.
   
   In question A, for example, the key words and numbers are $24.90 and split equally.

✔ Eliminate any answers that you know are wrong.

✔ To estimate, round each number to the nearest 10 or 100.

✔ Check your answer to be sure it makes sense.
Directions
Terrell and his brother and sister play in a band called 3-Tee.
Answer questions 1 and 2 about the band.

1 At a recent music festival, 3-Tee played for an hour. Each of its songs is between 3 and 4 minutes long. About how many songs did the band play in an hour?
   - fewer than 10
   - between 10 and 15
   - between 15 and 20
   - more than 20

2 At a concert, 3-Tee sold 89 CDs for $10.99 each. About how much money did the group make?
   - $89.00
   - $99.00
   - $990.00
   - $1100.00

Connie plays basketball for her middle school team. Answer questions 3–5 about the team.

3 Connie has scored a total of 32 points in 8 games this season. Which number sentence should you use to find out how many points Connie has averaged per game?
   - $32 + 8 = \square$
   - $32 \times \square = 8$
   - $32 \div 8 = \square$
   - $32 - \square = 8$

4 At a recent game, Connie and her friend Tanya together scored half the points for their team. The team scored 54 points. What else do you need to know to figure out how many points Connie scored?
   - how many points the other team scored
   - whether Connie scored more points than Tanya
   - whether Connie and Tanya’s team won
   - how many points Tanya scored

5 Last year, Connie’s team scored a total of 1045 points. The season was 20 games long. How many points did the team average per game?
   - fewer than 50
   - between 50 and 55
   - between 55 and 60
   - more than 60
6 Kami’s dad buys night crawlers to use as bait for fishing. If night crawlers cost $2.39 per carton, about how much does Kami’s dad pay for 3 cartons of night crawlers?
   
   - $3.00
   - $5.50
   - $7.50
   - $9.00

7 At several supermarkets, bananas cost between 20 and 25 cents a pound. Which is the best estimate of the cost of 4 pounds of bananas?
   
   - $0.90
   - $1.20
   - $1.50
   - $1.80

8 Ty and his friends went to the video arcade. They used a total of 30 game tokens. Each person used the same number of tokens. What else do you need to know to find how many tokens each person used?
   
   - how many people got tokens
   - how much each game cost
   - how much the tokens cost
   - how many tokens were left

9 There are 42 people going on a trip to the aquarium. Each van can hold 8 people. To get everyone there, they will have to send at least how many vans?
   
   - 5
   - 6
   - 8
   - 9

10 Doug works at the pet store. He makes $7.50 per hour. Last week he earned a total of $210. Which is closest to the number of hours he worked?
   
   - 300 hours
   - 30 hours
   - 10 hours
   - 3 hours

11 Jun has to make 60 gallons of punch for the school fair. Each can of powdered-drink mix makes 7.5 gallons. Write a number sentence he could use to find out how many cans of powdered-drink mix he needs.

12 Four friends are waiting in line at the movie theater. Jenny is standing directly in front of Ted. Ann is not first or last in line. Gary is standing behind Ann. Draw a picture or diagram showing the order in which the friends are standing.
Answer Keys

Problem-Solving Strategies

PRACTICE 1: TEST

1. C  7. A
2. H  8. F
5. B 11. $60 \div 7.5 = \square$
6. H 12. Jenny is first, Ted is second, Ann is third, and Gary is last.