

# FOR THE STUDENT

*Comprehensive Assessment of Mathematics Strategies (CAMS Series)* is a maths program that gives you practice with 12 maths strategies. In *Comprehensive Assessment of Mathematics Strategies, Book 5*, you will complete ten maths lessons. Each lesson has a maths theme and 12 questions about the theme. Each question provides you with practice of a particular maths strategy. After you have finished the first five lessons, you will complete a self-assessment. The self-assessment will help you determine how well you are doing and what goals you need to set to improve your maths skills. After you finish the last five lessons, you will complete another self-assessment. This self-assessment will help you determine how well you met your goals. *Comprehensive Assessment of Mathematics Strategies, Book 5* can help you become a better problem solver. You will come to understand the important information you must look for as you prepare to solve any and all problems.

This *Comprehensive Assessment of Mathematics Strategies* book was prepared for students by Robert G. Forest.

Illustrations by Susan Hawk (pages 2, 5, 8, 11, 14, 17, 19, 20, 23, 26, 29, 31)

# LESSON 1

## Hannah, part-time worker

Hannah helps out at Aunt Polly's supermarket on Wednesdays after school and Saturdays. Hannah's main job is to restock the shelves with canned goods. She also helps out as cashier and performs clean-up tasks. Now do numbers 1 to 12.



1. Hannah arranged four cereal boxes from least to greatest weight. Which of these is Hannah's correct arrangement?

Cereal	Weight (in grams)
Bran Flakes	453.6
Oaties	451.5
Big O's	458.2
Corn Crisps	453.8

- (A) Bran Flakes, Oaties, Corn Crisps, Big O's  
 (B) Big O's, Corn Crisps, Bran Flakes, Oaties  
 (C) Oaties, Bran Flakes, Corn Crisps, Big O's  
 (D) Oaties, Bran Flakes, Big O's, Corn Crisps

2. On Wednesday afternoon, Hannah placed 482 cans of vegetables on the shelves. On Saturday, she added another 612 cans of vegetables to the shelves. Estimate the number of cans she placed on shelves during the two work periods.

- (A) 1100 cans  
 (B) 1000 cans  
 (C) 1200 cans  
 (D) 1300 cans

3. Ms Arnold bought the following items at Aunt Polly's supermarket. What did Hannah charge Ms Arnold for the groceries?

Item	Cost
1 loaf of white bread	\$1.59 per loaf
2 boxes of Bran Flakes	\$3.29 each
3 tins of corn	2 for \$1.00
2 cartons of orange juice	\$1.85 per carton

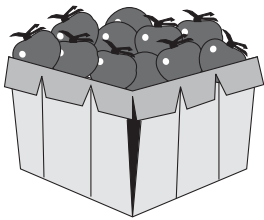
- (A) \$18.73  
 (B) \$9.58  
 (C) \$12.62  
 (D) \$13.37

4. Hannah removed the apples from two baskets to make separate displays, one of green apples and one of red apples. If each basket had a supply of 48 apples and Hannah removed a total of 57 green apples, how many red apples were there?

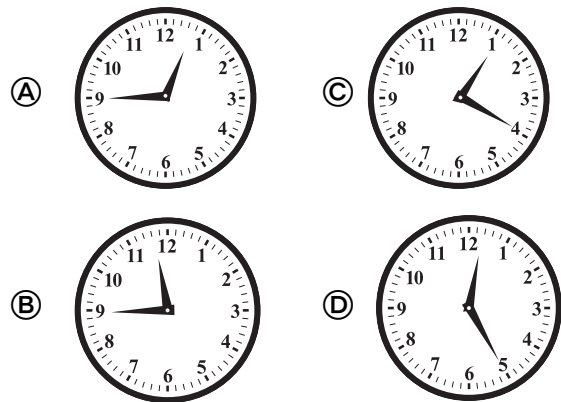
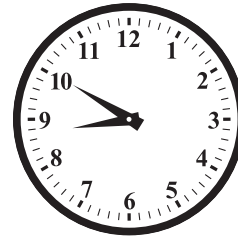
- (A) 39 red apples  
 (B) 29 red apples  
 (C) 43 red apples  
 (D) 105 red apples

5. Hannah filled each of 27 small baskets with 24 cherry tomatoes. How many cherry tomatoes did she use to fill all the baskets?

- (A) 51 tomatoes
- (B) 436 tomatoes
- (C) 648 tomatoes
- (D) 812 tomatoes



7. On Saturday, Hannah started work at the time shown on the clock below. She worked 3 hours and 35 minutes. Then she went to lunch. Which clock shows the time that she took her lunch break?



6. Hannah's three friends together bought  $\frac{1}{2}$  kilogram of apples to share. What fraction of the kilogram did each friend get?

- (A)  $\frac{3}{4}$
- (B)  $\frac{1}{6}$
- (C)  $\frac{1}{8}$
- (D)  $\frac{5}{6}$

8. On Wednesday afternoon, Hannah worked at the meat counter. Mr Pateuk bought  $\frac{1}{2}$  kilogram of ham and  $\frac{3}{4}$  kilogram of turkey breast. How many grams of meat did Hannah sell to Mr Pateuk?

- (A) 1250 grams
- (B) 750 grams
- (C) 500 grams
- (D) 1000 grams

9. Hannah is taking a count of the number of cans of peas in stock. The missing number in the pattern below is the same as the number of cans of peas in stock. Work out the pattern to find the missing number.

16, 35, 73, \_\_\_\_\_, 301

- (A) 121
- (B) 204
- (C) 96
- (D) 149

10. Hannah drew two lines on a sign. Then, using these two lines as a guide, she printed the words shown on the sign. What do the two guide lines appear to be?

Cherry tomatoes

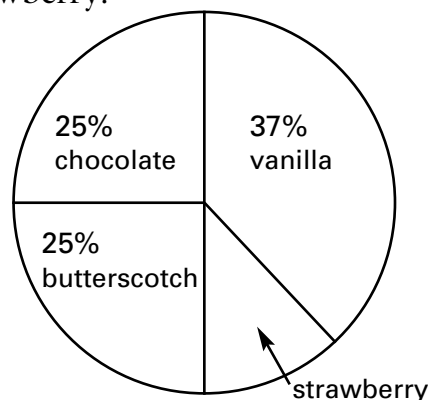
- (A) parallel lines
- (B) perpendicular lines
- (C) intersecting lines
- (D) lines of symmetry

11. Hannah sold 4 varieties of cheese on Saturday afternoon. What is the probability that the cheese the next customer buys will be cheddar?

Cheese	Number of sales
Cheddar	15
Parmesan	7
Swiss	10
Gouda	8

- (A)  $\frac{7}{10}$
- (B)  $\frac{3}{4}$
- (C)  $\frac{3}{8}$
- (D)  $\frac{5}{6}$

12. Hannah made a pie chart to show what percentage of each pudding was sold during one week. What percentage of the pudding sold was strawberry?



- (A) 17%
- (B) 13%
- (C) 15%
- (D) 21%

# LESSON 2

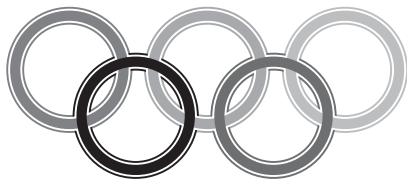
## Angelo, world's most awesome sports fan

Angelo is a sports fan. He enjoys all kinds of sports but has a special liking for cricket, soccer, rugby, basketball and hockey. He plays cricket and basketball for his school. He also plays golf with his friends. Angelo enjoys gathering sports trivia. Now do numbers 1 to 12.



1. The modern Olympic Games began in 1896. Angelo wrote this important date in Roman numerals. Which of these represents the year 1896?

- (A) MMCCCXCIV
- (B) MCCMXCVI
- (C) MDCCCVI
- (D) MDCCCXCVI



3. Angelo knows that the maximum playing area of a rugby field is 100 metres long and 70 metres wide. What did Angelo correctly work out to be the perimeter of a rugby field?

- (A) 240 metres
- (B) 170 metres
- (C) 340 metres
- (D) 270 metres

2. In 1995, the estimated number of people playing golf in Australia was around 4 million. Angelo wrote a number that could fit that estimate. Which of these did he write?

- (A) 4,136,498
- (B) 4,782,153
- (C) 3,248,020
- (D) 3,376,498

4. In 2004, Australian cricket batsmen Matthew Hayden and Justin Langer combined for an opening partnership of 255 runs. If Langer scored 138 runs, how many runs did Hayden make?

- (A) 203 runs
- (B) 102 runs
- (C) 97 runs
- (D) 117 runs