4A *Time: 4 minutes*
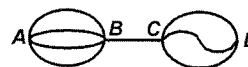
Allie has half as much money as Ben. Ben has $3 more than Emma. Emma has 5 times as much money as Shauna. Shauna has $1. How much money do Allie and Ben have together?

12

4B *Time: 5 minutes*

Following only the paths shown, what is the number of different paths that go from A to B to C to D and touch each of those points exactly once?

12

4C *Time: 5 minutes*

Sarah and Tyler ride their bikes. They start at the same time from the same point and ride in the same direction. Sarah travels 20 miles every hour, and Tyler travels 15 miles every hour. At the end of how many hours will Sarah be 30 miles ahead of Tyler?
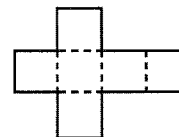
6

4D *Time: 7 minutes*

Michael has some cards. If he puts them in 5 equal piles, there are 3 left over. If he puts them in 4 equal piles, there are 2 left over. If he puts them in 3 equal piles, there is 1 card left over. What is the fewest cards Michael may have?

58

4E *Time: 7 minutes*

The figure shown is made up of 6 congruent squares. The perimeter of the figure is 42 cm. It is folded along the dotted lines to form a box. How many 1-cm cubes can fit in the box?

27

5A *Time: 4 minutes*
In the diagram below, what is the sum of the numbers in the shaded boxes?

1	2	3	4	5	6	7	8
9	10	11	12	13	14	15	16
17	18	19	20	21	22	23	24

(150)

5B *Time: 5 minutes*
A toll bridge charges $4 for a car and $6 for a truck. One day 200 of these vehicles crossed the bridge and paid a total of $860 in tolls. How many of these vehicles were trucks?

(30)

5C *Time: 6 minutes*
Zach has 2 blue candies for every 1 red candy. After he eats 1 of the blues and 2 of the reds, Zach has 5 blue candies for every 2 red candies. How many candies does Zach start with?

(24)

5D *Time: 7 minutes*
A cubical box without a top is 5 cm on each edge. The box is filled with 125 identical 1-cm cubes that exactly fill the box. For how many 1-cm cubes does exactly one face touch the box?

(57)

5E *Time: 5 minutes*
The average of 6 consecutive odd numbers is 50. What is the least of these numbers?

(45)

1A *Time: 3 minutes*
Suppose it is now 4:00 PM. What time will it be in 245 hours? Label your answer AM or PM.

9 PM
21

1B *Time: 4 minutes*
Ashley's locker number is a three-digit multiple of 5. The tens digit is the sum of the hundreds digit and the ones digit. The sum of all three digits is 16. No digit is repeated. What is Ashley's locker number?

385

1C *Time: 5 minutes*
Ten friends have an average of 5 toy soldiers each. Lee joins them, and now the average is 6 toy soldiers each. How many toy soldiers does Lee have?
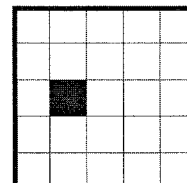
16

1D *Time: 6 minutes*
Tracy's Trophies charges by the letter for engraving. There is one fee for each vowel and a different fee for each consonant. CAROL costs $31 to engrave. GABRIEL costs $43 to engrave. How many dollars does BRIDGET cost to engrave?

45

1E *Time: 6 minutes*
As shown, the 5 × 5 "checkerboard" contains one shaded square. In this diagram, how many squares of any size do not include the shaded square?

39