

Kangaroo-Style Math Practice, Grades 5-6, Set 2

Name: _____ Date: _____

Choose the correct answer (A, B, C, D or E). Problems get harder as you go: the first two are worth 3 points, the next two 4 points and the last two 5 points.

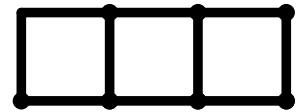
- 1.** 21 children go on a trip. Each van can take 4 children. What is the smallest number of vans they need?

3 pts

(A) 4 (B) 5 (C) 6 (D) 7 (E) 8

- 2.** A row of 3 squares needs 10 matchsticks, as shown.
How many matchsticks are needed for a row of 18 squares?

3 pts



(A) 54 (B) 55 (C) 56 (D) 60 (E) 72

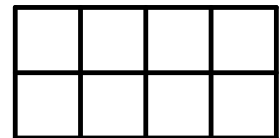
- 3.** There are 30 students in a class. Exactly $\frac{1}{3}$ of them walk to school and the rest come by bus. How many come by bus?

4 pts

(A) 10 (B) 19 (C) 20 (D) 21 (E) 22

- 4.** How many squares of any size can you find in this picture?

4 pts



(A) 8 (B) 10 (C) 11 (D) 12 (E) 13

- 5.** In a chess club, 10 players each play exactly one game against every other player. How many games are played?

5 pts

(A) 44 (B) 45 (C) 46 (D) 55 (E) 90

- 6.** A farm has only chickens and cows. Together they have 29 heads and 74 legs. How many cows are there?

5 pts

(A) 7 (B) 8 (C) 9 (D) 18 (E) 21

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Answer Key

Choose the correct answer (A, B, C, D or E). Problems get harder as you go: the first two are worth 3 points, the next two 4 points and the last two 5 points.

1. **(C) 6**

$21 \div 4 = 5$ with 1 left over, and those children need one more van: 6.

2. **(B) 55**

The first square needs 4 sticks and each new square adds 3 more: $4 + 3 \times 17 = 55$.

3. **(C) 20**

$\frac{1}{3}$ of 30 is $30 \div 3 \times 1 = 10$ students walking, so $30 - 10 = 20$ come by bus.

4. **(C) 11**

There are 8 small squares, and the bigger squares made of several small ones add up to 11 in all.

5. **(B) 45**

Each player plays 9 games, and every game has two players: $10 \times 9 \div 2 = 45$ games.

6. **(B) 8**

If all 29 animals were chickens there would be 58 legs. The extra 16 legs come from cows, 2 extra legs each, so there are 8 cows.