

Kangaroo-Style Math Practice, Grades 5-6, Set 7

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.** 33 children go on a trip. Each van can take 5 children. What is the smallest number of vans they need?

3 pts

(A) 5 (B) 6 (C) 7 (D) 8 (E) 9

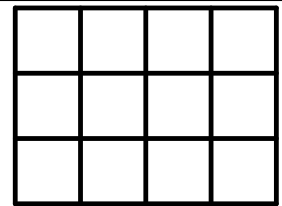
- 2.** I think of a number. I add 7, then multiply the result by 2, and get 34. What was my number?

3 pts

(A) 9 (B) 10 (C) 11 (D) 17 (E) 20

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

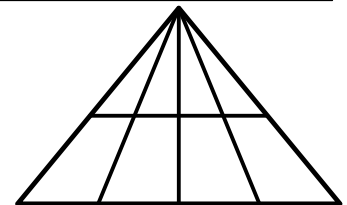
4 pts



(A) 12 (B) 18 (C) 19 (D) 20 (E) 22

- 4.** How many triangles are there in this picture?

4 pts



(A) 4 (B) 5 (C) 19 (D) 20 (E) 22

- 5.** A book has 50 pages numbered 1, 2, 3, ... up to 50. How many digits are printed in all?

5 pts

(A) 82 (B) 90 (C) 91 (D) 92 (E) 100

- 6.** Same shapes stand for the same number. What is triangle + circle?

5 pts

$$\triangle + \triangle + \bigcirc = 24$$

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(A) 8 (B) 16 (C) 17 (D) 19 (E) 32

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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) 7**
 $33 / 5 = 6$ with 3 left over, and those children need one more van: 7.
2. **(B) 10**
Work backwards: $34 / 2 = 17$, then $17 - 7 = 10$.
3. **(D) 20**
There are 12 small squares, and the bigger squares made of several small ones add up to 20 in all.
4. **(D) 20**
Every pair of lines from the top corner makes a triangle with the bottom line: that is 10 triangles, and the same again with the middle line, so the total is doubled.
5. **(C) 91**
Pages 1-9 use 9 digits, pages 10-50 use 82: 91 digits.
6. **(B) 16**
Adding both rows gives three triangles and three circles = 48, so one of each is $48 / 3 = 16$.