Kangaroo-Style Math Practice, Grades 5-6, Set 1

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. 3 pts I think of a number. I add 2, then multiply the result by 3, and get 30. What was my number?

(A) 7 (B) 8 (C) 9 (D) 10 (E) 24

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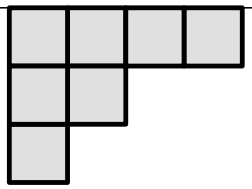
2. 3 pts The shape is made of squares with sides of 3 cm. What is its perimeter?



side = 3 cm

(A) 21 cm (B) 36 cm (C) 42 cm (D) 48 cm (E) 84 cm

---

3. 4 pts In a chess club, 10 players each play exactly one game against every other player. How many games are played?

(A) 44 (B) 45 (C) 50 (D) 55 (E) 90

---

4. 4 pts Today is Wednesday. What day of the week will it be in 93 days?

(A) Monday (B) Friday (C) Sunday (D) Thursday (E) Saturday

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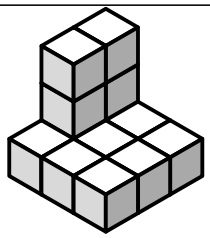
5. 5 pts This building is made of cubes. How many more cubes are needed to make a big 3 by 3 by 3 cube?



(A) 12 (B) 13 (C) 14 (D) 17 (E) 18

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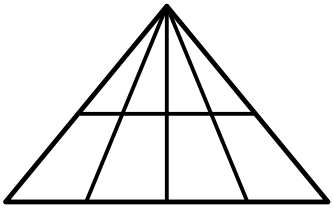
6. 5 pts How many triangles are there in this picture?



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

Kangaroo-Style Math Practice, Grades 5-6, Set 1

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. **(B) 8**

Work backwards: 30 / 3 = 10, then 10 - 2 = 8.

2. **(C) 42 cm**

Walk around the outside: there are 14 square sides on the edge, each 3 cm long, so 14 x 3 = 42 cm.

3. **(B) 45**

Each player plays 9 games, and every game has two players: 10 x 9 / 2 = 45 games.

4. **(B) Friday**

Every 7 days it is Wednesday again. 93 = 13 x 7 + 2, so count 2 days on from Wednesday: Friday.

5. **(C) 14**

The building has 13 cubes. A 3 x 3 x 3 cube has 27 cubes, so 27 - 13 = 14 more are needed.

6. **(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.

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

Name: _____ Date: _____

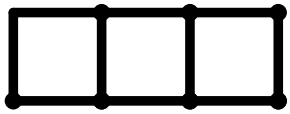
Choose the correct answer (A, B, C, D or E). Problems get harder as you go: the first two are worth 3 points, the next two 4 points and the last two 5 points.

1. 3 pts
21 children go on a trip. Each van can take 4 children. What is the smallest number of vans they need?

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

---

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



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

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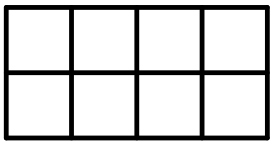
3. 4 pts
There are 30 students in a class. Exactly 1/3 of them walk to school and the rest come by bus. How many come by bus?

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

---

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



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

---

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

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

---

6. 5 pts
A farm has only chickens and cows. Together they have 29 heads and 74 legs. How many cows are there?

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

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

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 / 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 x 17 = 55.

3. **(C) 20**

1/3 of 30 is 30 / 3 x 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 x 9 / 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.

Kangaroo-Style Math Practice, Grades 5-6, Set 3

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. 3 pts Ruby buys 6 books that cost $4 each and pays with a $50 bill. How much change does Ruby get?

(A) $21 (B) $24 (C) $26 (D) $36 (E) $46

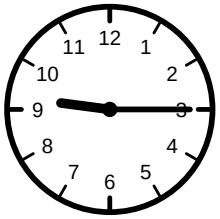
---

2. 3 pts I think of a number. I add 7, then multiply the result by 3, and get 39. What was my number?

(A) 5 (B) 6 (C) 7 (D) 13 (E) 18

---

3. 4 pts A movie starts at the time shown on the clock and lasts 1 hour 35 minutes. At what time does it end?



(A) 10:05 (B) 10:50 (C) 11:50 (D) 10:35 (E) 9:50

---

4. 4 pts What number comes next? 4, 6, 9, 13, 18, ?

(A) 22 (B) 23 (C) 24 (D) 25 (E) 26

---

5. 5 pts Today is Wednesday. What day of the week will it be in 83 days?

(A) Monday (B) Friday (C) Tuesday (D) Thursday (E) Wednesday

---

6. 5 pts A book has 66 pages numbered 1, 2, 3, ... up to 66. How many digits are printed in all?

(A) 114 (B) 123 (C) 124 (D) 132 (E) 133

Kangaroo-Style Math Practice, Grades 5-6, Set 3

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) $26**

The books cost 6 x $4 = $24, so the change is $50 - $24 = $26.

2. **(B) 6**

Work backwards: 39 / 3 = 13, then 13 - 7 = 6.

3. **(B) 10:50**

Start at 9:15, add 1 hour and then 35 minutes to reach 10:50.

4. **(C) 24**

The gaps grow by 1 each time (2, 3, 4, ...), so the next gap is 6 and 18 + 6 = 24.

5. **(C) Tuesday**

Every 7 days it is Wednesday again. 83 = 11 x 7 + 6, so count 6 days on from Wednesday: Tuesday.

6. **(B) 123**

Pages 1-9 use 9 digits, pages 10-66 use 114: 123 digits.

Kangaroo-Style Math Practice, Grades 5-6, Set 4

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. 3 pts
25 children go on a trip. Each van can take 4 children. What is the smallest number of vans they need?

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

---

2. 3 pts
Eli buys 3 books that cost $4 each and pays with a $50 bill. How much change does Eli get?

(A) $12 (B) $33 (C) $38 (D) $46 (E) $48

---

3. 4 pts
Today is Wednesday. What day of the week will it be in 76 days?

(A) Tuesday (B) Thursday (C) Monday (D) Wednesday (E) Friday

---

4. 4 pts
A book has 40 pages numbered 1, 2, 3, ... up to 40. How many digits are printed in all?

(A) 62 (B) 71 (C) 72 (D) 73 (E) 80

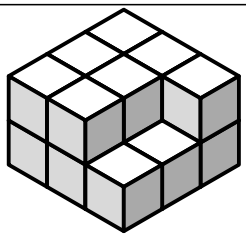
---

5. 5 pts
Posts are placed every 3 m all the way around a circular pond with a 30 m long path. How many posts are there?

(A) 9 (B) 10 (C) 11 (D) 12 (E) 30

---

6. 5 pts
This building is made of cubes. How many more cubes are needed to make a big 3 by 3 by 3 cube?



(A) 9 (B) 11 (C) 14 (D) 16 (E) 18

Kangaroo-Style Math Practice, Grades 5-6, Set 4

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**

25 / 4 = 6 with 1 left over, and those children need one more van: 7.

2. **(C) $38**

The books cost 3 x $4 = $12, so the change is $50 - $12 = $38.

3. **(A) Tuesday**

Every 7 days it is Wednesday again. 76 = 10 x 7 + 6, so count 6 days on from Wednesday: Tuesday.

4. **(B) 71**

Pages 1-9 use 9 digits, pages 10-40 use 62: 71 digits.

5. **(B) 10**

Around a circle the first and last post are the same, so there are 30 / 3 = 10 posts.

6. **(B) 11**

The building has 16 cubes. A 3 x 3 x 3 cube has 27 cubes, so 27 - 16 = 11 more are needed.

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

Name: _____ Date: _____

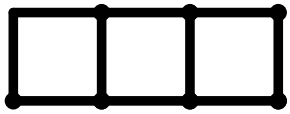
Choose the correct answer (A, B, C, D or E). Problems get harder as you go: the first two are worth 3 points, the next two 4 points and the last two 5 points.

1. 3 pts
26 children go on a trip. Each van can take 5 children. What is the smallest number of vans they need?

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

---

2. 3 pts
A row of 3 squares needs 10 matchsticks, as shown. How many matchsticks are needed for a row of 12 squares?



(A) 36 (B) 37 (C) 38 (D) 40 (E) 48

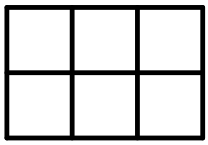
---

3. 4 pts
In a chess club, 7 players each play exactly one game against every other player. How many games are played?

(A) 20 (B) 21 (C) 22 (D) 28 (E) 42

---

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



(A) 6 (B) 7 (C) 8 (D) 9 (E) 10

---

5. 5 pts
There are 30 students in a class. Exactly 4/6 of them walk to school and the rest come by bus. How many come by bus?

(A) 5 (B) 10 (C) 12 (D) 20 (E) 25

---

6. 5 pts
A farm has only chickens and cows. Together they have 16 heads and 54 legs. How many cows are there?

(A) 5 (B) 10 (C) 11 (D) 12 (E) 13

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

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**

26 / 5 = 5 with 1 left over, and those children need one more van: 6.

2. **(B) 37**

The first square needs 4 sticks and each new square adds 3 more: 4 + 3 x 11 = 37.

3. **(B) 21**

Each player plays 6 games, and every game has two players: 7 x 6 / 2 = 21 games.

4. **(C) 8**

There are 6 small squares, and the bigger squares made of several small ones add up to 8 in all.

5. **(B) 10**

4/6 of 30 is 30 / 6 x 4 = 20 students walking, so 30 - 20 = 10 come by bus.

6. **(C) 11**

If all 16 animals were chickens there would be 32 legs. The extra 22 legs come from cows, 2 extra legs each, so there are 11 cows.

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

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. 3 pts I think of a number. I add 2, then multiply the result by 4, and get 44. What was my number?

(A) 8 (B) 9 (C) 10 (D) 11 (E) 36

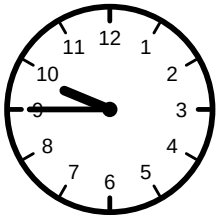
---

2. 3 pts Aria buys 6 books that cost $4 each and pays with a $50 bill. How much change does Aria get?

(A) $21 (B) $24 (C) $26 (D) $36 (E) $46

---

3. 4 pts A movie starts at the time shown on the clock and lasts 2 hours 25 minutes. At what time does it end?



(A) 12:10 (B) 1:10 (C) 12:55 (D) 12:25 (E) 11:10

---

4. 4 pts What number comes next? 1, 4, 8, 13, 19, ?

(A) 21 (B) 25 (C) 26 (D) 27 (E) 31

---

5. 5 pts Today is Tuesday. What day of the week will it be in 63 days?

(A) Monday (B) Thursday (C) Wednesday (D) Friday (E) Tuesday

---

6. 5 pts A book has 102 pages numbered 1, 2, 3, ... up to 102. How many digits are printed in all?

(A) 189 (B) 198 (C) 204 (D) 207 (E) 208

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

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. **(B) 9**

Work backwards: 44 / 4 = 11, then 11 - 2 = 9.

2. **(C) $26**

The books cost 6 x $4 = $24, so the change is $50 - $24 = $26.

3. **(A) 12:10**

Start at 9:45, add 2 hours and then 25 minutes to reach 12:10.

4. **(C) 26**

The gaps grow by 1 each time (3, 4, 5, ...), so the next gap is 7 and 19 + 7 = 26.

5. **(E) Tuesday**

Every 7 days it is Tuesday again. 63 = 9 x 7 + 0, so count 0 days on from Tuesday: Tuesday.

6. **(B) 198**

Pages 1-9 use 9 digits, pages 10-99 use 180 and pages 100-102 use 9: 198 digits.

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

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

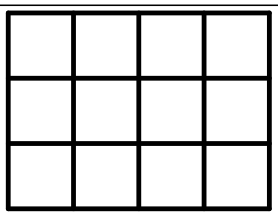
---

2. 3 pts
I think of a number. I add 7, then multiply the result by 2, and get 34. What was my number?

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

---

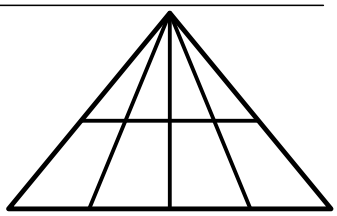
3. 4 pts
How many squares of any size can you find in this picture?



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

---

4. 4 pts
How many triangles are there in this picture?



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

---

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

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

---

6. 5 pts
Same shapes stand for the same number. What is triangle + circle?

△ + △ + ○ = 24

△ + ○ + ○ = 24

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

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

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.

Kangaroo-Style Math Practice, Grades 5-6, Set 8

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. 3 pts
44 children go on a trip. Each van can take 6 children. What is the smallest number of vans they need?

(A) 6 (B) 7 (C) 8 (D) 9 (E) 10

---

2. 3 pts
There are 24 students in a class. Exactly 2/4 of them walk to school and the rest come by bus. How many come by bus?

(A) 6 (B) 12 (C) 13 (D) 14 (E) 18

---

3. 4 pts
This row of 5 triangles uses 11 matchsticks. How many matchsticks are needed for a row of 23 triangles?

(A) 46 (B) 47 (C) 48 (D) 50 (E) 69

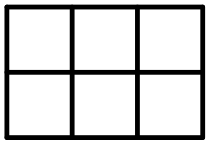
---

4. 4 pts
In a chess club, 11 players each play exactly one game against every other player. How many games are played?

(A) 54 (B) 55 (C) 56 (D) 66 (E) 110

---

5. 5 pts
How many squares of any size can you find in this picture?



(A) 6 (B) 7 (C) 8 (D) 9 (E) 10

---

6. 5 pts
A farm has only chickens and cows. Together they have 25 heads and 58 legs. How many cows are there?

(A) 3 (B) 4 (C) 5 (D) 14 (E) 21

Kangaroo-Style Math Practice, Grades 5-6, Set 8

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) 8**

44 / 6 = 7 with 2 left over, and those children need one more van: 8.

2. **(B) 12**

2/4 of 24 is 24 / 4 x 2 = 12 students walking, so 24 - 12 = 12 come by bus.

3. **(B) 47**

The first triangle uses 3 sticks and each new one adds 2: 3 + 2 x 22 = 47.

4. **(B) 55**

Each player plays 10 games, and every game has two players: 11 x 10 / 2 = 55 games.

5. **(C) 8**

There are 6 small squares, and the bigger squares made of several small ones add up to 8 in all.

6. **(B) 4**

If all 25 animals were chickens there would be 50 legs. The extra 8 legs come from cows, 2 extra legs each, so there are 4 cows.