## 11 PLus Help to Success Maths Sample Paper Answer Key

1. Kaz found a clue to find the secret number that was the first number in the combination to a safe. The clue said:

If you multiply the secret number by 5, then subtract 8 you get 17.

What is the secret number?

- a. 4
- b. 2
- c. 3
- d. 5
- 2. The air temperature in the North Pole in the morning was 3 degrees Celsius. By 10:00 am the temperature dropped 12 degrees. By noon the temperature had gone up 5 degrees. At 3:00 pm the temperature went up 9 degrees. By nightfall the temperature had dropped 16 more degrees. What was the temperature at the North Pole at nightfall?
  - a. 11 °C
  - b. 0 °C
  - c. -11 °C
  - d. -9 °C
- 3. Large tables in the library have 8 chairs and small tables have 4 chairs. How many students can sit at 3 large tables and 5 small tables if each seat is filled?
  - a. 20 students
  - b. 36 students
  - c. 44 students
  - d. 52 students
- 4. On Tuesday the mailman delivers 3 checks for \$5 each and 2 bills for \$2 each. If you had a starting balance of \$25, what is the ending balance?
  - a. \$36
  - b. \$26
  - c. \$6
  - d. \$-26
- 5. Mrs. Ridgeway is taking 150 students and teachers on a field trip to the museum. They can take cars and vans. Each car can hold 4 people and a van can hold 8 people. Which of the following is a way that describes how many cars and vans the school will need to use to take 150 people to the museum?
  - a. 12 vans and 12 cars
  - b. 13 vans 12 cars
  - c. 12 vans and 13 cars
  - d. 6 cars and 12 vans

6. Travis and his three friends go to the baseball game. Each person buys a ticket for \$8, a snack for \$4, and a drink for \$2. Which numerical expression represents the total cost of the trip to the baseball game for Travis and his friends?



- a.  $4 + (\$8 \times \$4 \times \$2)$
- $b. 4 \times (\$8 + \$4 + \$2)$
- c.  $(4 \times \$8) + (\$4 \times \$2)$
- d.  $(4 \times \$8 + \$4) + (4 \times \$4 + \$4)$
- 7. A toy store had thirty-two giant stuffed teddy bears in stock when they got another shipment with three bears in it. They put the bears onto shelves with five on each shelf. How many shelves did they use?
  - a. 5
  - b. 6
  - c. 7
  - d. 8
- 8. Sophie earns money for the chores she does each week.

She earns \$2 if she washes the dishes for the week.

She earns \$3 if she mows the lawn.

During June, Sophie washed the dishes 3 of the weeks and mowed the lawn 3 times.

She then spent \$7 of the money she earned.

Which expression shows the amount of money Sophie had left?

- a.  $(3+3) \times 2 7$
- b.  $3 + (2 \times 3) 7$
- c.  $(3 \times 2 + 3) 7$
- **d.** 3(2+3)-7
- 9. Tom won 50 pencils in a contest. He gave away 30 pencils and then gave 5 more to his friend Ben. Which expression can Tom use to find how many pencils he has left?
  - a. 50 (30 + 5)
  - b. 50 + (30 5)
  - c. (50+30)+5
  - **d.** (50-30)-5

- 10. Carol had 20 buckets of water. She gave 2 to her mom and her mom gave her 12 more. How many buckets does Carol have now?
  - a. 30
  - b. 22
  - c. 26
  - d. 10
- 11. Ms. Davis buys 4 packages of hot dog buns for a picnic. Each package has 10 buns. At the end of the picnic, there are 12 buns leftover. How many buns were used at the picnic?
  - a. 40
  - b. 52
  - c. 26
  - d. 28
- 12. Aliyah had \$24 to spend on seven pencils. After buying them she had \$10. How much did each pencil cost?
  - a. \$7
  - b. \$34
  - c. \$14
  - d. \$2
- 13. Fatima will go to the swimming pool 15 days this month. A one day pass is \$2.25. A monthly pass is \$25. How much money will Fatima save by buying a monthly pass?
  - a. \$33.75
  - b. \$8.75
  - c. \$7.75
  - d. \$6.00
- 14. Evaluate. Leave in simplest form.
  - $\frac{2}{3} \frac{4}{9} =$
  - a.  $\frac{2}{6}$
  - b.  $-\frac{2}{6}$
  - c.  $\frac{2}{9}$
  - d.  $-\frac{2}{9}$
- 15. What is  $\frac{3}{5}$  as a decimal number?
  - a. 0.35
  - b. 0.6
  - c. 0.66
  - d. 0.75

16. What fraction is equal to  $\frac{\frac{3x}{5}}{\frac{x}{4} + \frac{x}{2}}$ ?

$$\frac{5}{\frac{x}{4} + \frac{x}{2}}$$

- a.  $\frac{x^2}{5}$
- b.  $\frac{9x^2}{20}$

- 17. Write the unit rate.

\$200 in 8 hours

25 dollars an hour

18. Ms. James class has 30 students, of which 17 are girls. Write the ratio of girls to boys.

- 19.  $\frac{2}{3} \frac{4}{9} =$
- 20.  $\frac{1}{2} \div \frac{21}{7} =$ 
  - a. 3 1/2
  - b. 1/6
  - c. 1/7
  - d. 1/14

21. Reduce the fraction.

$$\frac{27}{36}$$

- a.  $\frac{27}{36}$
- b.  $\frac{9}{12}$
- c.  $\frac{7}{9}$
- **d.**  $\frac{3}{4}$
- 22. Which of these fractions are in simplest form?
  - a.  $\frac{2}{4}$
  - **b.**  $\frac{2}{5}$
  - c.  $\frac{1}{3}$
  - d.  $\frac{3}{6}$
  - e.  $\frac{3}{9}$
- 23. Is  $\frac{1}{8}$  less than, greater than, or equal to  $\frac{1}{2}$ ?

## a. less than 1/2

- b. greater than 1/2
- c. equal to 1/2
- 24. Is  $\frac{5}{8}$  less than, greater than, or equal to  $\frac{1}{2}$ ?
  - a. less than 1/2

## b. greater than 1/2

- c. equal to 1/2
- 25. Is  $\frac{4}{12}$  less than, greater than, or equal to  $\frac{1}{2}$ ?

## a. less than 1/2

- b. greater than 1/2
- c. equal to 1/2