

**5 POINTS**

1. Luka kept track of how long it took him to do his homework last week. How much time did he spend on his homework in total last week?

Monday	Tuesday	Wednesday	Thursday	Sunday
1 h 45 min	50 min	1 h 15 min	2 h 15 min	55 min



A. 6 hours    B. 7 hours    C. 6 h 45 min    D. 7h 15 min    E. 7h 5 min

2.  $\star + \star + \star + \star + \text{smiley} = \text{smiley} + \text{smiley} + \text{smiley}$

Which of the following is true?

A.  $\text{smiley} = \star + \text{smiley}$     B.  $\text{smiley} + \text{smiley} = \star$     C.  $\text{smiley} = \star + \star$     D.  $\text{smiley} = \star$     E.  $\text{smiley} = \star + \star + \star$

3. Jessica saved some money on Monday. She then saved \$3 more on Tuesday than on Monday. Subsequently, she saved \$3 more each day than the day before. By Thursday, she had saved \$100. How much money did she save on Monday?

A. \$20.50    B. \$23.00    C. \$22.50    D. \$24.00    E. \$29.50

4. Anika had \$285. She spent one third of it on a party dress, and half of the remainder on a purse. How much money did she have left?

A. \$190    B. \$85    C. \$95    D. \$140.50    E. \$138

5. A, B, and N represent different digits. What is the sum of A, B, and N?

$$\begin{array}{r} B A \\ \times 7 \\ \hline N A A \end{array}$$

A. 21    B. 19    C. 18    D. 15    E. 14

6. A television set costs \$2596. Mr. Dobb can buy 4 smartphones with that amount of money. How much more does a television set cost than a smartphone?

A. \$1847    B. \$1647    C. \$1657    D. \$1937    E. \$1947

7. The long sides of a rectangular garden measure 5 ft 6 in, and the short sides are 3 ft 4 in. What is the perimeter of the rectangular garden?

A. 17 ft 10 in    B. 18 ft    C. 17 ft 8 in    D. 20.5 ft    E. 17 ft 9 in

8. There are 4 apple juice boxes in the cooler. One fourth of the juice boxes in the cooler are apple juice. How many juice boxes are in the cooler?



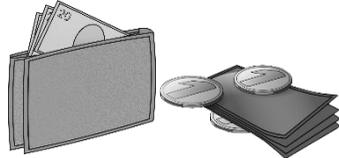
A. 1    B. 4    C. 8    D. 12    E. 16

**7 POINTS**

9. A wire of 500 cm long is cut into 3 pieces, A, B and C. A is 48 cm shorter than B, and C is twice as long as A. How long is wire C?

A. 150 cm    B. 113 cm    C. 151 cm    D. 226 cm    E. 206 cm

10. A pencil case costs \$3.55 and a mechanical pencil costs \$0.95. If Joanna buys three pencil cases and 5 mechanical pencils with her \$20, what could her change be?



A. 4 one-dollar bills, 3 quarters, and 1 nickel.  
 B. 1 five-dollar bill, 2 quarters, and 2 dimes.  
 C. 4 one-dollar bills, 2 quarters, and 2 nickels.  
 D. 4 one-dollar bills, 2 quarters, and 2 dimes.  
 E. 4 one-dollar bills, 2 quarters, 1 dime, and 1 nickel.

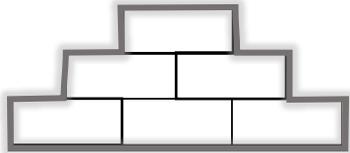
11. Dad, mom and their son Aidan walk to school. When dad makes 9 steps, mom makes 15 steps and Aidan makes 25 steps to cover the same distance as dad. Aidan counted that together with his mom they walked 400 steps, how many steps did his Dad make?

A. 97    B. 85    C.  $44\frac{4}{9}$     D. 80    E. 90

12. Alyssa and Eliza are twin sisters. Cameron and Quentin are twin brothers. The total age of all 4 of them is 232 years. Cameron is three times as old as Kevin, who is Quentin's son. If Eliza is 8 years older than Cameron, how old is Kevin?

A. 18 years old    B. 19 years old    C. 21 years old    D. 15 years old    E. 16 years old

13. A pyramid Sport Center is made of 6 identical rectangular courts, each with a perimeter of 170 yds. If you were given a task to paint safety lines around the outside of these courts, what would be the total length of safety lines?



A. 680 yds    B. 510 yds    C. 340 yds    D. 1020 yds    E. 515 yds

14. Kevin used sticks to make a total of 9 polygons, some were octagons and the rest were pentagons. He used a total of 63 sticks. If he used 8 sticks to make each octagon and 5 sticks to make each pentagon, how many of pentagons did he make?

A. 3    B. 4    C. 5    D. 6    E. 7

15. Lavanya had 60 books and Todd had 24 books. After Lavanya had given Todd some books, she had 20 more books than Todd. How many books did Lavanya give Todd?

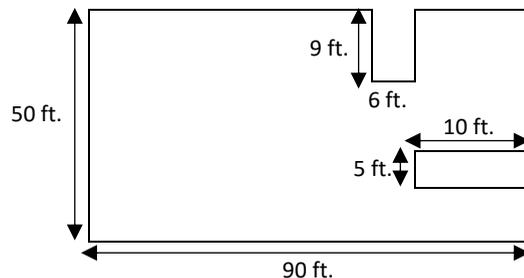


A. 6    B. 10    C. 12    D. 8    E. 16

**10 POINTS**

16. Find the perimeter of the following figure.

Figure is not drawn to scale.

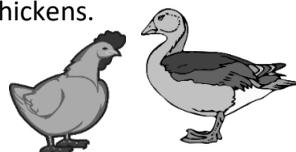


- A. 318 ft    B. 308 ft    C. 299 ft    D. 294 ft    E. 309 ft

17. For every 40 cans of chicken noodle soup purchased, a customer was given a discount of \$5. Each can of chicken noodle soup cost \$0.80. If Mr. Mahendran paid \$85, how many cans of chicken noodle soup did he buy?

- A. 106    B. 126    C. 122    D. 125    E. 120

18.  $\frac{4}{9}$  of the fowls in Mr. Kilstrom’s farm were ducks. The rest were chickens. After 516 ducks were sold, the number of ducks left was half the number of chickens. How many chickens were there in Mr. Kilstrom’s farm?

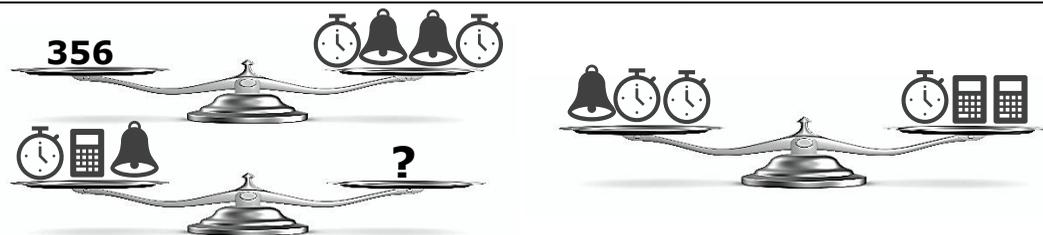


- A. 1660    B. 1460    C. 860    D. 1720    E. 1620

19. Tom multiplied 2018 by 10,001. Which statement is true?

- A. The product is less than 20,180,020.  
 B. There are more than 8 digits in the product.  
 C. The difference between the product and 2018 is 10,001  
 D. The product contains 4 zeroes.  
 E. The sum of the digits in the product is 22.

20.



Which answer can replace the question mark?

- A. 278    B. 289    C. 267    D. 256    E. Not enough information

# MATH CHALLENGE TOURNAMENT

## FALL 2018



### Problem Solving Challenge

#### Grade 4

#### Problem 1 – 20

**Do not begin until you are instructed to do so.**

***Problem Solving Challenge (40 minutes)***

You may use scratch paper to do any calculation to reach final answers.

Mark your answers in the ANSWER SHEET.

You have 40 minutes to complete the Problem-Solving Challenge