# Whatcom County Math Championship – 2017 Mental Math – 4<sup>th</sup> Grade

- 1. What is two times four times six?
- 2. What is two-thousand seventeen plus seven thousand, one hundred and two?
- 3. How many sixths are there in six and two-thirds?
- 4. What is the distance between three point six and negative four point seven?
- 5. Seven squares of area 36 are placed edge to edge. What is the perimeter?

### **SWITCH TEAM MEMBERS**

- 6. What is the area of a triangle with a base of twelve and a height of nine?
- 7. What is the least common multiple of fifteen and eighteen?
- 8. What is the remainder when nine hundred and twenty six is divided by seven?
- 9. What is the average of the first five square numbers?
- 10. What is the square of the difference of twenty-three and fourteen?

# **SWITCH TEAM MEMBERS**

- 11. How many inches are there in six feet, three inches?
- 12. How what is the side length of a square whose perimeter is equal to its area?
- 13. What is the product of four and a half and five and a half? Write your answer as a decimal.
- 14. How many minutes are there in a day?
- 15. What is the sum of the interior angles of an octagon?

- 16. What is the lowest common denominator for two-thirds and four-fifths?
- 17. What is the difference between nine squared and seven squared?
- 18. If you roll a eight-sided die and a six-sided die, how many different outcomes are there?
- 19. What is two to the fifth plus three to the fourth plus four to the third?
- 20. How many degrees does the minute hand of a clock travel from 11:40 a.m. to 1:15 p.m.?

# Whatcom County Math Championship – 2017 Mental Math – 5<sup>th</sup> Grade

- 1. What is two-thousand seventeen plus seven thousand, one hundred and two?
- 2. How many sixths are there in six and two-thirds?
- 3. What is the distance between three point six and negative four point seven?
- 4. Seven squares of area 36 are placed edge to edge. What is the perimeter?
- 5. What is the eleventh prime number?

## **SWITCH TEAM MEMBERS**

- 6. What is the least common multiple of fifteen and eighteen?
- 7. What is the remainder when nine hundred and twenty six is divided by seven?
- 8. What is the average of the first five square numbers?
- 9. What is the square of the difference of twenty-three and fourteen?
- 10. If the angles in a triangle are in a ratio of two to three to four, what is the smallest angle?

# **SWITCH TEAM MEMBERS**

- 11. How what is the side length of a square whose perimeter is equal to its area?
- 12. What is the product of four and a half and five and a half? Write your answer as a decimal.
- 13. How many minutes are there in a day?
- 14. What is the sum of the interior angles of an octagon?
- 15. What is the sum of the factors of eighteen?

- 16. What is the difference between nine squared and seven squared?
- 17. If you roll a eight-sided die and a six-sided die, how many different outcomes are there?
- 18. What is two to the fifth plus three to the fourth plus four to the third?
- 19. How many degrees does the minute hand of a clock travel from 11:40 a.m. to 1:15 p.m.?
- 20. Write the reciprocal of one point two as a fraction.

# Whatcom County Math Championship – 2017 Mental Math – 6<sup>th</sup> Grade

- 1. How many sixths are there in six and two-thirds?
- 2. What is the distance between three point six and negative four point seven?
- 3. Seven squares of area 36 are placed edge to edge. What is the perimeter?
- 4. What is the eleventh prime number?
- 5. What is the product of twenty-three and seventeen?

#### **SWITCH TEAM MEMBERS**

- 6. What is the remainder when nine hundred and twenty six is divided by seven?
- 7. What is the average of the first five square numbers?
- 8. What is the square of the difference of twenty-three and fourteen?
- 9. If the angles in a triangle are in a ratio of two to three to four, what is the smallest angle?
- 10. What is the volume of a cube with a surface area of 486?

# **SWITCH TEAM MEMBERS**

- 11. What is the product of four and a half and five and a half? Write your answer as a decimal.
- 12. How many minutes are there in a day?
- 13. What is the sum of the interior angles of an octagon?
- 14. What is the sum of the factors of eighteen?
- 15. One two three four in base five is what number in base ten?

- 16. If you roll a eight-sided die and a six-sided die, how many different outcomes are there?
- 17. What is two to the fifth plus three to the fourth plus four to the third?
- 18. How many degrees does the minute hand of a clock travel from 11:40 a.m. to 1:15 p.m.?
- 19. Write the reciprocal of one point two as a fraction.
- 20. Peggy scored eighty-three and ninety-five on two tests; what would she have to score on her next test to get an average of ninety on the three tests?

# Whatcom County Math Championship – 2017 Mental Math – 7<sup>th</sup> + 8<sup>th</sup> Grade

- 1. What is the distance between three point six and negative four point seven?
- 2. Seven squares of area 36 are placed edge to edge. What is the perimeter?
- 3. What is the eleventh prime number?
- 4. What is the product of twenty-three and seventeen?
- 5. What whole number is closest to the square root of three times fourteen?

## **SWITCH TEAM MEMBERS**

- 6. What is the average of the first five square numbers?
- 7. What is the square of the difference of twenty-three and fourteen?
- 8. If the angles in a triangle are in a ratio of two to three to four, what is the smallest angle?
- 9. What is the volume of a cube with a surface area of 486?
- 10. If you roll two six-sided dice and add the results, what is the probability that you will get a Fibonacci number? Write as a fraction in lowest terms.

#### **SWITCH TEAM MEMBERS**

- 11. How many minutes are there in a day?
- 12. What is the sum of the interior angles of an octagon?
- 13. What is the sum of the factors of eighteen?
- 14. One two three four in base five is what number in base ten?
- 15. What is eight factorial divided by five factorial?

- 16. What is two to the fifth plus three to the fourth plus four to the third?
- 17. How many degrees does the minute hand of a clock travel from 11:40 a.m. to 1:15 p.m.?
- 18. Write the reciprocal of one point two as a fraction.
- 19. Peggy scored eighty-three and ninety-five on two tests; what would she have to score on her next test to get an average of ninety on the three tests?
- 20. What is the area of a square with a diagonal of 32?