

## 6<sup>th</sup> Grade Varsity 2013 Practice Problems

1.  $\frac{(1/2 \times 1/3)}{(1/2 - 1/3)} = ?$

2. Two consecutive whole numbers are prime, what is their sum?

3.  $(1 - 1/2) + (1/2 - 1/4) + (1/4 - 1/8) + (1/8 - 1/16) = ?$

4. How many eighths are in 7.75?

5. Three consecutive multiples of 4 have the sum of 60. What is the greatest consecutive multiple?

6. Pat the Cat runs at 5m/sec and skates at 8 m/sec. How far can Pat the Cat skate in the same time it takes Pat the Cat to run 80 m?

7.

1

1 1

1 2 1

1 3 3 1

1 4 6 4 1

Find the six numbers for the next row in the pattern.

8. Anthony wants to join the basketball team this spring. In order to be allowed to play, he needs to have an 80% average in his math class. On his last four tests, he has scored 67%, 79%, 90% and 87%. What is the lowest score he can get on his next test in order to play basketball?

9. The measures of the angles of a quadrilateral are in the ratio of 1:2:3:4. What is the measure of the smallest angle of the figure?

10. A list of 300 numbers starts at 1. After that, every number is triple the number that precedes it. What is the 200<sup>th</sup> number on the list? Hint: Put your answer in exponential form.

## 6<sup>th</sup> Grade Varsity Practice Problem Answer Key

1. 1
2. 5
3. 15/16
4. 62
5. 24
6. 128 meters
7. 1, 5, 10, 10, 5, 1
8. 77%
9. 36 degrees
10.  $3^{199}$

