**A.P. Calculus –Summer Packet Solutions**

**Topic 1 Fractional and Negative Exponents**

 **Topic 2: Domains**

1. 2. 3.

4. 5. 6.

7. 8 9.

10. 11

12. All real numbers except: , and

**Topic 3: Solving inequalities (absolute value)**

1. 2. .

3 . 4.

5. 6. 7.

8. 9.

**Topic 4: Solving inequalities (quadratic)**

1. 2.

3. 4.

5. 6. 7.

8. 9.

**Topic 5: Special Factorization**



**Topic 6: Function Transformation**

1. Vertical shift down 4 2. Horizontal shift right 4

3. Reflect across x; horizontal shift left 2 4. Vertical stretch by factor of 5; vertical shift up 3

5. Horizontal shrink by a factor of ½. 6. Reflect all negative values across x axis.

7-12…coming soon

**Topic 7: Factor Theorem (*p* over *q* method/synthetic division)**



**Topic 8: Even and odd functions**



**Topic 9: Solving quadratic equations and quadratic formula**



**Topic 10: Asymptotes**

1. VA: 2. VA: 3. No VA

HA: HA: HA:

4. VA: 5. VA: 6. VA:

HA: HA: HA:

7. . VA: 8. VA: 9. VA:

HA: HA: HA:

**Topic 11: Complex Fractions**



**Topic 12: Composition of Functions**



**Topic 13: Solving Rational (fractional) Equations**



**Topic 14: Basic Right Triangle Trig**



**Topic 15: Solving Trigonometric Equations**

