

Advanced Geometry Final Exam Review Answers

1A $a_n = -5.8n + 196.4$

1B $a_n = (2n + 1)(2^n) - n^2$
 $a_{100} = (201)(2^{100}) - 100^2$

1C $a_n = 6n + 172$
So... $6n + 172 = 8662 \rightarrow n = 1415$ (# columns)
 $S = \frac{(8840)(1415)}{2} = 6,254,300$

2A Converse: If it is fun, then it is a math test
Contrapositive: If it is not fun, then it is not a math test.
Inverse: If it is not a math test, then it is not fun.

2B All Apples are Computers
An iMac is an Apple
An iMac is a computer.

3A Reflect across y-axis, right 6, down 7.

3B $x = 61$

3C $x = -3.89474$; $y = 5.47368$
None are Parallel

5A $x = 5.3333$ $v = 3.5$
 $y = 8.25$ $w = 7.625$
 $z = 3.75$ $r = 9.5$

5B $A = 26.4941$
 $B = 20.6889$

5C $x = 6.5$
 $y = -0.4$

6A 648

6B 28.5

6C 45.4506

7A 526.168 sq in

7B $V = 637.971$ cubic feet

Advanced Geometry

Final Exam Review Answers

Unit 1

- 1.) $4(12) + 1 = 49$
- 2.) $48(24) + 1 = 1153$
- 3.) 32
- 4.) 122
- 5.) $8 / 12 = 2 / 3$
- 6.) $8 / 12 = 2 / 3$
- 7.) $x = 4.5; y = 3.5$
- 8.) $a_n = (2n+1)^2 - (2n-1)^2$
 $a_{100} = 800$

Unit 6

- 1.) Acute
- 2.) 55.292 cm
- 3.) 729.478 sq cm
- 4.) $27\pi - \frac{81\sqrt{3}}{4}$
- 5.) 689.316
- 6.) 3746.26 sq cm
- 7.) 0.2146
- 8.) $\frac{\pi(40)^2}{2} + 80x = 16,000$
 $x = 168.584$
Height = $168.584 + 40$
Height = 208.584 cm
- 9.) Area = 2444.56
Perimeter = 222.921
- 10.) Acute

Unit 7

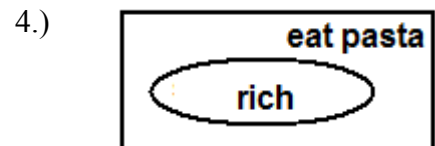
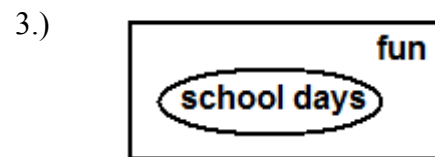
- 1.) $V = 904.779$ cu cm
 $SA = 452.389$ sq cm
- 2.) Cone
- 3.) 407.048 sq cm
- 4.) 1955.92 cu cm
- 5.) 306.57 sq cm
- 6.) 662.899 cu cm
- 7.) 59
- 8.) $V = 140$ cu cm
 $SA = 197.038$ sq cm
- 9.) $V = 112$ cu cm
 $SA = 198.259$ sq cm
- 10.) $V = 1870.61$ cu cm
 $SA = 1031.06$ cu cm

Unit 3

- 1.) $< 8, < 12; < 7, < 9;$
 $< 6, < 16; < 5, < 13;$
 $< 2, < 6; < 3, < 7$
 $< 12, < 15; < 11, < 13$
- 2.) $< 1, < 9; < 2, < 12;$
 $< 8, < 10; < 7, < 11;$
 $< 3, < 13; < 4, < 16;$
 $< 6, < 15; < 5, < 13$
 $< 1, < 3; < 2, < 4$
 $< 8, < 6; < 7, < 5$
 $< 9, < 13; < 12, < 16$
 $< 10, < 15; < 11, < 14$
- 3.) 360
- 4.) 423,900
- 5.) 13,320
- 6.) $m \parallel n$
- 7.) Reflect across x-axis,
right 2, down 4
- 8.) $x = 5; y = 7; p \parallel q$
- 9.) $x = 3.5; y = -1.5$

Unit 2

- 1.) If you like the Miami Heat,
then you like LeBron James.
- 2.) If you like English class, then you
like the book Fahrenheit 451.



- 5.) If it is hot, then it is summer.