

## Geometry Homework #2 – Answer Key

- 1)  $y = -4$  Angles are  $37^\circ, 96^\circ, 47^\circ$
- 2)  $x = 5$  Angles are  $23^\circ, 157^\circ$
- 3) Perimeter = 546 Area = 10,920
- 4) Perimeter = 54 Area = 252
- 5) Perimeter = 74 Area = 180
- 6) *Circumference* =  $16\pi$  exactly and 50.24 approximately  
*Area* =  $64\pi$  exactly and 200.96 approximately
- 7) Perimeter = 380 yards Area = 8,625 square yards
- 8) Perimeter = 148 inches Area = 1,254 square inches
- 9) *Circumference* =  $26\pi$  exactly and 81.64 approximately  
*Area* =  $169\pi$  exactly and 530.66 approximately
- 10) Red: Perimeter = 130 inches Area = 722 square inches  
White: Perimeter = 130 inches Area = 722 square inches  
Blue: Perimeter = 108 inches Area = 418 square inches  
Flag: Perimeter = 174 inches Area = 1,862 square inches
- 11) *Circumference* =  $26\pi$  inches exactly and 81.64 inches approximately  
*Area* =  $169\pi$  square inches exactly and 530.66 inches square approximately
- 12) *Circumference* =  $58\pi$  exactly and 182.12 approximately  
*Area* =  $841\pi$  exactly and 2640.74 approximately
- 13) Perimeter = 128 inches Area = 988 square inches
- 14) Green: Perimeter = 164 inches Area = 1,152 square inches  
Yellow: Perimeter = 168 inches Area = 768 square inches  
Red: Perimeter = 164 inches Area = 1,152 square inches  
Flag: Perimeter = 224 inches Area = 3,072 square inches
- 15) *Circumference* =  $15\pi$  exactly and 47.1 approximately  
*Area* =  $\frac{225}{4}\pi$  exactly and 176.625 approximately
- 16) *Circumference* =  $110\pi$  feet exactly and 345.4 feet approximately  
*Area* =  $3025\pi$  square feet exactly and 9,498.5 square feet approximately
- 17) Black: Perimeter = 128 inches Area = 456 square inches  
Green: Perimeter = 181 inches Area = 1,292 square inches  
White: Perimeter = 162 inches Area = 1,178 square inches  
Red: Perimeter = 181 inches Area = 1,292 square inches  
Flag: Perimeter = 262 inches Area = 4,218 square inches
- 18) *Circumference* =  $174\pi$  exactly and 546.36 approximately  
*Area* =  $7569\pi$  exactly and 23766.66 approximately
- 19) Red: Perimeter = 120 inches Area = 756 square inches  
Yellow: Perimeter = 228 inches Area = 672 square inches  
Green: Perimeter = 328 inches Area = 1,428 square inches  
Flag: Perimeter = 220 inches Area = 2,856 square inches
- 20) *Circumference* =  $30\pi$  inches exactly and 94.2 inches approximately  
*Area* =  $225\pi$  square inches exactly and 706.5 square inches approximately