

TSI Review – Geometry, Evaluating & Simplifying Functions

1. A rectangle has a Perimeter of 250m. The width of the rectangle is 50m. What is the Area?

Area: _____

2. Find the difference between the t values when $s = 24$ and $s = 7$. Decimal answer is allowed.

$$t = \frac{\sqrt{s}}{3}$$

Answer: _____

3. A cylinder has radius of $3a$ and a height of $4a + 3$. The formula for the volume of a cylinder is $v = \pi r^2 h$. Evaluate the volume of the cylinder with the given radius and height and simplify completely.

Answer: _____

4. Use the following formula to convert from Fahrenheit to Celsius:

$$C = \frac{5}{9} (°F - 32)$$

If the temperature is $86°\text{F}$ what will it be in $°\text{C}$?

Answer: _____

5. Given the population of bear growth since 1980:

$$f(t) = (1500)(1.07)^t$$

t = Number of Years since 1980

t = 5

f(5) = _____

6. Find $f\left(\frac{1}{3}\right)$

$$f(x) = \frac{4}{x} + \frac{2}{x}$$

Answer: _____

7. Complete the table for the function

$$f(x) = \sqrt{x+2} + 3$$

x	f(x)
-2	
0	
2	

8. Complete the table for the functions below and then sketch the graphs.

x	$y = -x^2 + 2x - 4$	$y = -2x^2 + 8x - 3$
-2		
1		
2		
4		

