Find the 75th term for each sequence.

- 1. 7, 14, 28, 56, 112, ...
- 2. 23, 15, 7, -1, -9, ...
- 3. 1,4,9,16,25,...

4. A sequence is created by adding the same number every time. Find t_3 if $t_2 = 9$ and $t_4 = 17$.

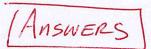
5. A sequence is created by multiplying by the same number every time. Find t_3 if $t_2 = 12$ and $t_4 = 192$.

Thursday, August 29, 2019 Bellwork Alg 2 Find the 75th term for each sequence.

XL X2 X2 X2

Geometric Sequence

Arithmetic Sequence



4. A sequence is created by adding the same number every time. Find t_3 if $t_2 = 9$ and $t_4 = 17$.

$$\frac{9}{t_2}, \frac{?}{t_3}, \frac{17}{t_4}$$

$$t_{y} = 9 + x + x = 17$$

$$9 + 2x = 17$$

$$-9$$

$$2x = 8 \longrightarrow x = 4$$

5. A sequence is created by multiplying by the same number every time. Find t_3 if $t_2 = 12$ and $t_4 = 192$.

$$\frac{12}{t_2} = \frac{?}{t_3} = \frac{192}{t_4}$$

$$t_{4} = 12 \cdot x \cdot x = 192$$

$$\frac{12x^{2} = 192}{12}$$

$$\sqrt{x^{2}} = 16$$

X = +4

$$t_3 = 12.x$$

$$= 12(4) = 48$$
or
$$= 12(-4) = -48$$