Name : _____

Geometric Sequence

Sheet 1

Find the next three terms of each geometric sequence.

1) $1, \sqrt{7}, 7, 7\sqrt{7}, 49, \ldots$

2) 3.5, 10.5, 31.5, 94.5, 283.5, ...

3) –16, 64, –256, 1024, –4096, ...

4) $\frac{4}{7}, \frac{8}{21}, \frac{16}{63}, \frac{32}{189}, \frac{64}{567}, \ldots$

5) 9, 27, 81, 243, 729, ...

6) –4.8,–9.6, –19.2, –38.4, –76.8, ...

7) 175, –350, 700, –1400, 2800, ...

8) 26, 78, 234, 702, 2106, ...

9) Tony harvested 4 bushels of apples from the first row of trees in his orchard. The second and third rows produced 12 and 36 bushels of apples respectively. If the increase in yield continues at a constant rate, determine the bushels of apples harvested from each of the next three rows.

10) A jute twine was wrapped tightly around a wide basket in 6 loops. The length of the twine used for the first loop measured 28.5 cm. The second and third loops used up 57 cm and 114 cm respectively. How much twine was used for each of the 4th, 5th and 6th loops?

Name : _____

Answer key

Sheet 1

Geometric Sequence

Find the next three terms of each geometric sequence.

1) 1, $\sqrt{7}$, 7, $7\sqrt{7}$, 49, ...

$49\sqrt{7}$, 343, $343\sqrt{7}$

2) 3.5, 10.5, 31.5, 94.5, 283.5, ...

850.5, 2551.5, 7654.5

3) –16, 64, –256, 1024, –4096, ...

16384, –65536, 262144

4) $\frac{4}{7}, \frac{8}{21}, \frac{16}{63}, \frac{32}{189}, \frac{64}{567}$, ...

$\frac{128}{1701}, \frac{256}{5103}, \frac{512}{15309}$

5) 9, 27, 81, 243, 729, ...

2187, 6561, 19683

6) –4.8,–9.6, –19.2, –38.4, –76.8, ...

–153.6, –307.2, –614.4

7) 175, –350, 700, –1400, 2800, ...

–5600, 11200, –22400

8) 26, 78, 234, 702, 2106, ...

6318, 18954, 56862

9) Tony harvested 4 bushels of apples from the first row of trees in his orchard. The second and third rows produced 12 and 36 bushels of apples respectively. If the increase in yield continues at a constant rate, determine the bushels of apples harvested from each of the next three rows.

108, 324, 972

10) A jute twine was wrapped tightly around a wide basket in 6 loops. The length of the twine used for the first loop measured 28.5 cm. The second and third loops used up 57 cm and 114 cm respectively. How much twine was used for each of the 4th, 5th and 6th loops?

228 cm, 456 cm, 912 cm