

**AFM****Warm Up 11.17.2016**

- Find the missing term in the geometric sequence:  $-5, 10, -20, 40, \underline{\hspace{1cm}}$ .
- (A)  $-80$        (B)  $-35$        (C)  $80$        (D)  $100$
- What is the tenth term in the geometric sequence:  $144, 72, 36, 18, \dots$ ?
- (A)  $0$        (B)  $\frac{9}{64}$        (C)  $\frac{9}{32}$        (D)  $\frac{9}{16}$

Write an equation for the  $n$ th term of each geometric sequence.

39.  $36, 12, 4, \dots$

40.  $64, 16, 4, \dots$

• Find  $a_7$  for the geometric sequence  $729, -243, 81, \dots$ .

• Find the sum of each infinite geometric series, if it exists. (Lesson 11-5)

44.  $9 + 6 + 4 + \dots$

45.  $\frac{1}{8} + \frac{1}{32} + \frac{1}{128} + \dots$

46.  $4 - \frac{8}{3} + \frac{16}{9} + \dots$

Find the sum of each geometric series. (Lesson 11-4)

47.  $2 - 10 + 50 - \dots$  to 6 terms

48.  $3 + 1 + \frac{1}{3} + \dots$  to 7 terms