

Missing Terms in Sequences

Given that each of these sequences is arithmetic (linear), find the missing terms.

- (a) 5, 8, __, __, 17, 20, ...
(b) 9, __, 17, 21, __, 29, ...
(c) 29, 27, __, 23, __, 19, ...
(d) __, -6, -11, __, -21, -26, ...
(e) 0.5, 0.8, __, __, 1.7, 2, ...

- (a) 11, 14
(b) 13, 25
(c) 25, 21
(d) -1, -16
(e) 1.1, 1.4

Given that each of these sequences is geometric, find the missing terms.

- (a) 1, 2, 4, __, __, 32, 64, ...
(b) 8, 24, __, 216, __, 1944, ...
(c) __, 100, 50, 25, __, 6.25, ...
(d) 8, __, 18, 27, __, 60.75, ...
(e) __, $\frac{1}{4}$, __, $\frac{1}{16}$, $\frac{1}{32}$, $\frac{1}{64}$, ...

- (a) 8, 16
(b) 72, 648
(c) 200, 12.5
(d) 12, 40.5
(e) $\frac{1}{2}$, $\frac{1}{8}$

Given that each of these sequences is quadratic, find the missing terms.

- (a) 5, 6, 8, __, __, 20, ...
(b) 1, __, __, 13, 23, 36, ...
(c) __, 4, 8, 14, __, 32, ...
(d) 12, __, 20, 27, 36, __, ...
(e) 7, 8, 5, 11, __, __, 24.5, ...

- (a) 11, 15
(b) 2, 6
(c) 2, 22
(d) 15, 47
(e) 14.5, 19

Find the missing terms in each of these sequences.

- (a) 1000, 200, __, 8, 1.6, __
(b) 2, 3, 5, __, __, 17, ...
(c) __, 2, -1, __, -7, -10, ...
(d) __, __, 6.1, 6.5, 6.9, 7.3, ...
(e) $\frac{3}{4}$, __, $\frac{27}{16}$, $\frac{81}{32}$, $\frac{243}{64}$, __, ...

- (a) 40, 0.32
(b) 8, 12
(c) 5, -4
(d) 5.3, 5.7
(e) $\frac{9}{8}$, $\frac{729}{128}$