

Name : _____

Arithmetic Sequence

Determine whether the sequences given below form arithmetic progressions. If they do, identify the common difference(d).

1) $4, 0, -4, -8, -12, \dots$

2) $6.6, 7.2, 7.8, 8.4, 9, \dots$

3) $7, 10, 16, 19, 25, \dots$

4) $5\sqrt{2}, \sqrt{2}, -3\sqrt{2}, -7\sqrt{2}, -11\sqrt{2}, \dots$

5) $-1.2, -1.4, -1.6, -1.8, -2, \dots$

6) $1, -6, 36, -216, 1296, \dots$

7) $1, 4, 8, 13, 19, \dots$

8) $9, 14, 19, 24, 29, \dots$

9) $-8, -15, -22, -29, -36, \dots$

10) $3, 9, 27, 81, 243, \dots$

Arithmetic Sequence

Determine whether the sequences given below form arithmetic progressions. If they do, identify the common difference(d).

1) $4, 0, -4, -8, -12, \dots$

Yes, $d = -4$

2) $6.6, 7.2, 7.8, 8.4, 9, \dots$

Yes, $d = 0.6$

3) $7, 10, 16, 19, 25, \dots$

No

4) $5\sqrt{2}, \sqrt{2}, -3\sqrt{2}, -7\sqrt{2}, -11\sqrt{2}, \dots$

Yes, $d = -4\sqrt{2}$

5) $-1.2, -1.4, -1.6, -1.8, -2, \dots$

Yes, $d = -0.2$

6) $1, -6, 36, -216, 1296, \dots$

No

7) $1, 4, 8, 13, 19, \dots$

No

8) $9, 14, 19, 24, 29, \dots$

Yes, $d = 5$

9) $-8, -15, -22, -29, -36, \dots$

Yes, $d = -7$

10) $3, 9, 27, 81, 243, \dots$

No
