1. Is the sequence arithmetic? If so, find the common difference.

-2.4, 6.4, 15.2, 24

- [A] no
- [B] yes, 8.8
- [C] yes, 8.9
- [D] yes, 8.6

2. Is the sequence arithmetic? If so, find the common difference.

$$-6.9, -10, -13.1, -16.2$$

- [A] yes, -3.3
- [B] yes, -3
- [C] no
- [D] yes, -3.1

3. Is the sequence arithmetic? If so, find the common difference.

11.1, 21.6, 32.2, 42.6

- [A] yes, 10.4
- [B] no
- [C] yes, 10.7
- [D] yes, 10.5

4. Is the sequence arithmetic? If so, find the common difference.

-8.4, 5.5, 19.4, 33.3

- [A] yes, 14
- [B] yes, 13.9
- [C] yes, 13.7
- [D] no

5. Is the sequence arithmetic? If so, find the common difference.

11.1, 18.2, 25.3, 32.4

- [A] no
- [B] yes, 7.2
- [C] yes, 6.9
- [D] yes, 7.1

Find the common ratio:

6.
$$3, 2, \frac{4}{3}, \dots$$

[A]
$$-\frac{3}{2}$$
 [B] $\frac{2}{3}$ [C] $\frac{3}{2}$ [D] $-\frac{2}{3}$

[B]
$$\frac{2}{3}$$

[C]
$$\frac{3}{2}$$

[D]
$$-\frac{2}{3}$$

7.
$$-\frac{1}{2}$$
, $-\frac{2}{5}$, $-\frac{8}{25}$, ...

[A]
$$-\frac{5}{4}$$
 [B] $\frac{5}{4}$ [C] $-\frac{4}{5}$ [D] $\frac{4}{5}$

[B]
$$\frac{5}{4}$$

[C]
$$-\frac{4}{5}$$

[D]
$$\frac{4}{5}$$

8.
$$\frac{1}{3}$$
, $\frac{1}{9}$, $\frac{1}{27}$, ...

$$[A] -3$$

[B]
$$\frac{1}{3}$$

[A]
$$-3$$
 [B] $\frac{1}{3}$ [C] $-\frac{1}{3}$

9.
$$-\frac{2}{5}$$
, -1, $-\frac{5}{2}$, ...

[A]
$$\frac{5}{2}$$

[B]
$$-\frac{2}{5}$$

[C]
$$\frac{2}{5}$$

[A]
$$\frac{5}{2}$$
 [B] $-\frac{2}{5}$ [C] $\frac{2}{5}$ [D] $-\frac{5}{2}$

10.
$$\frac{3}{4}$$
, $\frac{3}{16}$, $\frac{3}{64}$, ...

[A]
$$\frac{1}{4}$$
 [B] -4 [C] $-\frac{1}{4}$ [D] 4

[C]
$$-\frac{1}{2}$$

- [1] B
- [2] D
- [3] B
- [4] <u>B</u>
- [5] D
- [6] <u>B</u>
- [7] <u>D</u>
- [8] <u>B</u>
- [9] <u>A</u>
- [10] <u>A</u>