

**QUESTION 1** For the following number sequences, write the next three numbers.

- a 4, 7, 10, 13, \_\_\_\_\_, \_\_\_\_\_, \_\_\_\_\_
- b 1, 5, 9, 13, \_\_\_\_\_, \_\_\_\_\_, \_\_\_\_\_
- c 2, 9, 16, 23, \_\_\_\_\_, \_\_\_\_\_, \_\_\_\_\_
- d 27, 22, 17, 12, \_\_\_\_\_, \_\_\_\_\_, \_\_\_\_\_
- e 63, 55, 47, 39, \_\_\_\_\_, \_\_\_\_\_, \_\_\_\_\_
- f 36, 33, 30, 27, \_\_\_\_\_, \_\_\_\_\_, \_\_\_\_\_
- g 3, 9, 27, 81, \_\_\_\_\_, \_\_\_\_\_, \_\_\_\_\_
- h 1, 10, 100, 1000, \_\_\_\_\_, \_\_\_\_\_, \_\_\_\_\_
- i 2, 4, 8, 16, \_\_\_\_\_, \_\_\_\_\_, \_\_\_\_\_
- j 5, 10, 20, 40, \_\_\_\_\_, \_\_\_\_\_, \_\_\_\_\_
- k 31, 29, 27, 25, \_\_\_\_\_, \_\_\_\_\_, \_\_\_\_\_

**QUESTION 2** Complete the following number sequences.

- a 15, 28, 41, 54, \_\_\_\_\_, \_\_\_\_\_, \_\_\_\_\_
- b 1600, 800, 400, 200, \_\_\_\_\_, \_\_\_\_\_, \_\_\_\_\_
- c 10, 30, 90, 270, \_\_\_\_\_, \_\_\_\_\_, \_\_\_\_\_
- d 1, 4, 16, 64, \_\_\_\_\_, \_\_\_\_\_, \_\_\_\_\_
- e 50, 43, 36, 29, \_\_\_\_\_, \_\_\_\_\_, \_\_\_\_\_
- f 1, 4, 9, 16, \_\_\_\_\_, \_\_\_\_\_, \_\_\_\_\_
- g 1, 8, 27, 64, \_\_\_\_\_, \_\_\_\_\_, \_\_\_\_\_
- h 3, 4, 6, 9, \_\_\_\_\_, \_\_\_\_\_, \_\_\_\_\_
- i 4, 3, 7, 6, 10, \_\_\_\_\_, \_\_\_\_\_, \_\_\_\_\_
- j 384, 192, 96, 48, \_\_\_\_\_, \_\_\_\_\_, \_\_\_\_\_

Part of a number pattern is shown. Fill in the next 3 missing numbers.

1, 5, 9, 13, \_\_\_\_, \_\_\_\_, \_\_\_\_

10, 8, 6, 4, \_\_\_\_, \_\_\_\_, \_\_\_\_

10, - 8, 6, - 4, \_\_\_\_, \_\_\_\_, \_\_\_\_

-1, -0.5, 0, 0.5, \_\_\_\_, \_\_\_\_, \_\_\_\_

-3.2, -1.8, -0.4, 1, \_\_\_\_, \_\_\_\_, \_\_\_\_

2, 4, 7, 11, \_\_\_\_, \_\_\_\_, \_\_\_\_

100, 50, 25, 12.5, \_\_\_\_, \_\_\_\_, \_\_\_\_

**QUESTION 3** The first number and the rule are given; use these to write the next four numbers.

**a** 160; divide by 2: \_\_\_\_\_, \_\_\_\_\_, \_\_\_\_\_, \_\_\_\_\_

**b** 7; multiply by 3: \_\_\_\_\_, \_\_\_\_\_, \_\_\_\_\_, \_\_\_\_\_

**c** 2; multiply by 4 and subtract 3: \_\_\_\_\_, \_\_\_\_\_, \_\_\_\_\_, \_\_\_\_\_

**d** 625; divide by 5: \_\_\_\_\_, \_\_\_\_\_, \_\_\_\_\_, \_\_\_\_\_

**e** 10000; divide by 10: \_\_\_\_\_, \_\_\_\_\_, \_\_\_\_\_, \_\_\_\_\_

**f** 5; multiply by 4 and subtract 10: \_\_\_\_\_, \_\_\_\_\_, \_\_\_\_\_, \_\_\_\_\_

**QUESTION 1** For the following number patterns write the next three numbers in the pattern. Write the rule that forms the pattern.

**a** 2, 5, 8, 11, \_\_\_\_\_, \_\_\_\_\_, \_\_\_\_\_

Rule: \_\_\_\_\_

**b** 3, 6, 12, 24, \_\_\_\_\_, \_\_\_\_\_, \_\_\_\_\_

Rule: \_\_\_\_\_

**c** 48, 43, 38, 33, \_\_\_\_\_, \_\_\_\_\_, \_\_\_\_\_

Rule: \_\_\_\_\_

**d** 5, 50, 500, 5000, \_\_\_\_\_, \_\_\_\_\_, \_\_\_\_\_

Rule: \_\_\_\_\_

**e** 6400, 3200, 1600, 800, \_\_\_\_\_, \_\_\_\_\_, \_\_\_\_\_

Rule: \_\_\_\_\_

**QUESTION 5** Write 4 consecutive odd numbers beginning with:

**a** 23; \_\_\_\_\_, \_\_\_\_\_, \_\_\_\_\_, \_\_\_\_\_

**b** 101; \_\_\_\_\_, \_\_\_\_\_, \_\_\_\_\_, \_\_\_\_\_

**c** 999; \_\_\_\_\_, \_\_\_\_\_, \_\_\_\_\_, \_\_\_\_\_

**QUESTION 6** Write 3 consecutive odd numbers whose sum is 21 and the product is 315

\_\_\_\_\_, \_\_\_\_\_, \_\_\_\_\_.