Name:

**Use the patterns to answer the questions.**

**Answers**

**1)**   Pattern A

| 9 | 11 | 13 | 15 | 17 |
|---|----|----|----|----|
| 7 | 9 | 11 | 13 | 15 |

Pattern B

The patterns above are synchronized. If the number in pattern A is 117, what will be the number in pattern B?

1. _____

2. _____

3. _____

**2)**   Pattern A

| 3 | 4 | 5 | 6 | 7 |
|----|----|----|----|----|
| 12 | 16 | 20 | 24 | 28 |

Pattern B

The patterns above are synchronized. If the number in pattern A is 16, what will be the number in pattern B?

4. _____

5. _____

6. _____

**3)** In a pattern the first number is a 5. The second number is a 10. The third is a 15. Fourth is a 20. If the pattern continues will the 25th number end in a 5 or a 0?

7. _____

8. _____

**4)** In a pattern the first number is a 3. The second number is a 6. The third is a 9. Fourth is a 12. If the pattern continues what will be the 10th number in the pattern?

9. _____

10. _____

**5)** A pattern starts with 7. The second number is a 9. The third is a 11. Fourth is a 13 and fifth is 15. If you double the 20th number in the pattern, will the result be even or odd?

**6)** A pattern starts with 8. The second number is a 16. The third is a 24. Fourth is a 32 and fifth is 40. If the pattern continues will the 24th number in the pattern be even or odd?

**7)** A pattern starts with 9. The second number is a 18. The third is a 27. Fourth is a 36 and fifth is 45. If the pattern continues will the 22nd number in the pattern be even or odd?

**8)** A pattern starts with 6. The second number is a 12. The third is a 18. Fourth is a 24 and fifth is 30. If the pattern continues will the 13th number in the pattern be even or odd?

**9)** A pattern starts with 3. The second number is a 6. The third is a 9. Fourth is a 12 and fifth is 15. If the pattern continues will the 16th number in the pattern be even or odd?

**10)** A pattern starts with 7. The second number is a 14. The third is a 21. Fourth is a 28 and fifth is 35. If the pattern continues will the 25th number in the pattern be even or odd?

**Use the patterns to answer the questions.**

1) Pattern A

| 9 | 11 | 13 | 15 | 17 |
|---|----|----|----|----|

Pattern B

| 7 | 9 | 11 | 13 | 15 |
|---|---|----|----|----|

The patterns above are synchronized. If the number in pattern A is 117, what will be the number in pattern B?

2) Pattern A

| 3 | 4 | 5 | 6 | 7 |
|---|---|---|---|---|

Pattern B

| 12 | 16 | 20 | 24 | 28 |
|----|----|----|----|----|

The patterns above are synchronized. If the number in pattern A is 16, what will be the number in pattern B?

3) In a pattern the first number is a 5. The second number is a 10. The third is a 15. Fourth is a 20. If the pattern continues will the 25th number end in a 5 or a 0?

4) In a pattern the first number is a 3. The second number is a 6. The third is a 9. Fourth is a 12. If the pattern continues what will be the 10th number in the pattern?

5) A pattern starts with 7. The second number is a 9. The third is a 11. Fourth is a 13 and fifth is 15. If you double the 20th number in the pattern, will the result be even or odd?

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8) A pattern starts with 6. The second number is a 12. The third is a 18. Fourth is a 24 and fifth is 30. If the pattern continues will the 13th number in the pattern be even or odd?

9) A pattern starts with 3. The second number is a 6. The third is a 9. Fourth is a 12 and fifth is 15. If the pattern continues will the 16th number in the pattern be even or odd?

10) A pattern starts with 7. The second number is a 14. The third is a 21. Fourth is a 28 and fifth is 35. If the pattern continues will the 25th number in the pattern be even or odd?

1. **115**

2. **64**

3. **5**

4. **30**

5. **even**

6. **even**

7. **even**

8. **even**

9. **even**

10. **odd**