



Which Number Comes Next?

Determine the next number in the sequence or pattern. Defend your choice with a short written response. Explain the sequence or pattern in each number set.

1. 2 4 6 8 10 12 _____

2. 7 14 21 28 35 42 _____

3. 2 3 5 7 11 13 _____

4. 2 4 8 16 32 64 _____

5. 11 13 17 19 29 31 41 _____

6. 0 1 1 2 3 5 8 _____

7. 4 6 8 9 10 12 14 _____

8. 2 4 16 256 _____

9. 2 3 6 18 108 _____

10. 1 4 9 16 25 _____

LESSON
1-2

Challenge

Money Grows

If an investment of \$50 doubles in value, your investment will be worth $50 \cdot 2 = \$100$.

If it doubles again, your investment will be worth $50 \cdot 2 \cdot 2 = \$200$.
You can also write this as $50 \cdot 2^2 = \$200$.

If your money doubles a third time, it will be worth $50 \cdot 2^3 = \$400$.

Write the correct answer.

1. If you invest \$400, how much will it be worth if it doubles in value twice?

2. If an investment of \$550 doubles in value twice, how much will it be worth?

3. If you invest \$75, how much will it be worth if it doubles in value 4 times?

4. If you invest \$125, how much will it be worth if it doubles in value 4 times?

5. If an investment of \$75 triples in value 3 times, how much will it be worth?

6. If an investment of \$125 triples in value 4 times, how much will it be worth?

When Jasmine turned 13, she started saving \$5 per month until she turned 18. She then invested her total savings so that it doubled in value every 7 years.

7. How much money did Jasmine save by the time she turned 18? _____

8. How many times will her investment double from age 18 to age 60? _____

9. How much will Jasmine's investment be worth when she turns 60? _____

When Jake turned 13, he started saving \$1.50 per week until he turned 19. He then invested his total savings so that it tripled in value every 12 years.

10. How much money did Jake save by the time he turned 19? _____

11. How many times will his investment triple from age 19 to age 55? _____

12. How much will Jake's investment be worth when he turns 55? _____