Decisions in number rules

6 practice questions

1. Use this rule once: below 10, add 2; otherwise, subtract 3. Start at 5.

5 is below 10, so $5 + 2 = 7$.

Answer: 7.

2. Use the same rule once. Start at 13.

13 is not below 10, so $13 - 3 = 10$.

Answer: 10.

3. Use the same rule once. Start at 10.

Equal to 10 uses the otherwise branch: $10 - 3 = 7$.

Answer: 7.

4. Use the same rule twice. Start at 8.

$8 + 2 = 10$. Check again: $10 - 3 = 7$.

Answer: 10, then 7.

5. A different rule says: above 20, subtract 5; otherwise, add 5. Apply it once to 20.

20 is not above 20. Use $20 + 5 = 25$.

Answer: 25.

6. A child starts at 12 and adds 2 using the first rule. Explain the mistake.

The condition must be checked before choosing an action.

Answer: 12 is not below 10. Subtract 3 to get 9.