

# Decimal to binary

Name

Date

Convert each number to binary using repeated division by 2.

| Problem | Answer | Problem | Answer |
|---------|--------|---------|--------|
| 1. 5    |        | 9. 244  |        |
| 2. 207  |        | 10. 50  |        |
| 3. 196  |        | 11. 108 |        |
| 4. 8    |        | 12. 8   |        |
| 5. 113  |        | 13. 106 |        |
| 6. 163  |        | 14. 69  |        |
| 7. 134  |        | 15. 174 |        |
| 8. 224  |        | 16. 224 |        |

## Answer key — Decimal to binary

| #  | Problem | Answer                                   |
|----|---------|------------------------------------------|
| 1  | 5       | 101 (1,0,1 → read upward)                |
| 2  | 207     | 11001111 (1,1,1,1,0,0,1,1 → read upward) |
| 3  | 196     | 11000100 (0,0,1,0,0,0,1,1 → read upward) |
| 4  | 8       | 1000 (0,0,0,1 → read upward)             |
| 5  | 113     | 1110001 (1,0,0,0,1,1,1 → read upward)    |
| 6  | 163     | 10100011 (1,1,0,0,0,1,0,1 → read upward) |
| 7  | 134     | 10000110 (0,1,1,0,0,0,0,1 → read upward) |
| 8  | 224     | 11100000 (0,0,0,0,0,1,1,1 → read upward) |
| 9  | 244     | 11110100 (0,0,1,0,1,1,1,1 → read upward) |
| 10 | 50      | 110010 (0,1,0,0,1,1 → read upward)       |
| 11 | 108     | 1101100 (0,0,1,1,0,1,1 → read upward)    |
| 12 | 8       | 1000 (0,0,0,1 → read upward)             |
| 13 | 106     | 1101010 (0,1,0,1,0,1,1 → read upward)    |
| 14 | 69      | 1000101 (1,0,1,0,0,0,1 → read upward)    |
| 15 | 174     | 10101110 (0,1,1,1,0,1,0,1 → read upward) |
| 16 | 224     | 11100000 (0,0,0,0,0,1,1,1 → read upward) |