

Algebra**Complete each sentence to find the missing numbers.**

- 1 If $12 \times 12 = 144$, then $11 \times 13 =$ _____.
- 2 If $15 \times 15 = 225$, then $14 \times 16 =$ _____.
- 3 If $18 \times 18 = 324$, then $17 \times 19 =$ _____.
- 4 If $27 \times 27 =$ _____, then $26 \times 28 =$ _____.
- 5 If $34^2 =$ _____, then $33 \times 35 =$ _____.
- 6 If $49^2 =$ _____, then $48 \times 50 =$ _____.
- 7 If $82 \times 82 =$ _____, then _____ \times _____ = _____.
- 8 If $75^2 =$ _____, then _____ \times _____ = _____.
- 9 If $39^2 =$ _____, then _____ \times _____ = _____.

Reasoning and Proof**Solve each puzzle to find the mystery number.**

- 10 Multiple of 9 less than 72
Tens digit is twice ones digit □ □

- 11 Multiple of 8 greater than 24 but less than 64
One of the digits is twice the other □ □

- 12 Square number greater than 5×5 but less than 12×12
No digit is greater than 4
Sum of the digits is 4 □ □ □

- 13 Multiple of 7 greater than 6×7 but less than 12×7
Tens digit is less than ones digit
Digits are consecutive numbers □ □

- 14 Square number greater than 6×6 but less than 12×12
Sum of the digits is odd
Tens digit is greater than ones digit □ □

- 15 Multiple of 6 greater than 7×6 but less than 13×6
Tens digit is greater than ones digit
Sum of the digits is even □ □