

```
public static int power(int base, int exponent) {  
    if (exponent == 0) {  
        return 1;  
    }  
  
    if (exponent == 1) {  
        return base;  
    }  
  
    return base * power(base, exponent - 1);  
}
```

The diagram illustrates the recursive execution of the `power` function. A purple circle on the left represents the initial call to `power(base, exponent)`. Red lines and circles show the sequence of recursive calls: `power(base, exponent-1)` is called repeatedly until it reaches the base case (`exponent == 1`). Yellow circles represent return values being passed back up the call stack. A grey circle marks the return statement in the base case. The final result is returned from the initial call.