

```
from django.test import TestCase

from .models import Product, Category # Replace with your model paths

from .factories import ProductFactory # Assuming you have a factories.py file
```

```
class TestProductModel(TestCase):

    """Tests for the Product model."""

    def test_can_find_product_by_category(self):

        """Tests if products can be retrieved by their category."""

        # Create a category (assuming a Category model exists)
        category = Category.objects.create(name="Electronics")

        # Create products with the same category
        product1 = ProductFactory.create(category=category)
        product2 = ProductFactory.create(category=category)

        # Find products belonging to the created category
        found_products = Product.objects.filter(category=category)

        # Check if both created products are retrieved
        self.assertEqual(len(found_products), 2)
        self.assertIn(product1, found_products)
        self.assertIn(product2, found_products)
```