

Name \_\_\_\_\_

Date \_\_\_\_\_

**Applying the Remainder Theorem - Matching Worksheet**

Match the problems to the remainders of their quotient.

1.  $(2x^3 - x^2 - 21x + 18) \div (x - 3)$

\_\_\_\_\_

a. 360

2.  $(3x^2 + x^2 + 4x - 11) \div (x + 3)$

\_\_\_\_\_

b. 2

3.  $(x^3 + 3x - x^2 - 20) \div (x + 4)$

\_\_\_\_\_

c. -10

4.  $(5x^3 + 6x^2 - 4x - 20) \div (x - 3)$

\_\_\_\_\_

d. -128

5.  $(3x^7 - x^4 + 2x^3 - 5x^2 - 4) \div (x - 2)$

\_\_\_\_\_

e. 157

6.  $(3 + 5x - 4 - 6x^2 + 5) \div (x + 1)$

\_\_\_\_\_

f. 29

7.  $(4x^3 + 5x - 2x + 3) \div (x - 3)$

\_\_\_\_\_

g. 13

8.  $(x^3 + x - 4 + 4x^2) \div (x + 3)$

\_\_\_\_\_

h. 120

9.  $(3 + 2x^4 - 5x + x^2) \div (x - 2)$

\_\_\_\_\_

i. -7

10.  $(4x^3 - 4x^2 - 4x + 4) \div (x + 3)$

\_\_\_\_\_

j. -112

