

Factoring out Common Factor

Factor the common factor out of each expression.

1) $12p^2 + 15$

$3(4p^2 + 5)$

2) $45x + 50$

$5(9x + 10)$

3) $30r + 40r^3$

$10r(3 + 4r^2)$

4) $-25b - 35$

$-5(5b + 7)$

5) $-15n^2 - 3n$

$-3n(5n + 1)$

6) $-16 - 8k^3$

$-8(2 + k^3)$

7) $35v - 5$

$5(7v - 1)$

8) $70b^2 + 7b^4$

$7b^2(10 + b^2)$

9) $8n + 4$

$4(2n + 1)$

10) $-7n^2 - 14$

$-7(n^2 + 2)$

11) $12n^2 - 12n - 10$

$2(6n^2 - 6n - 5)$

12) $56x - 7x^2 + 14x^3$

$7x(8 - x + 2x^2)$

13) $-70r^5 - 10r^4 + 40r^3$

$-10r^3(7r^2 + r - 4)$

14) $28n^{10} + 7n^3 - 14n^2$

$7n^2(4n^8 + n - 2)$

15) $10v^3 - 25v + 40$

$5(2v^3 - 5v + 8)$

16) $-54x^3 + 63x - 63$

$-9(6x^3 - 7x + 7)$

17) $20n^5 + 15n^2 - 50n + 50$

$5(4n^5 + 3n^2 - 10n + 10)$

18) $-x^4 + 7x^3 + 6x^2 + x$

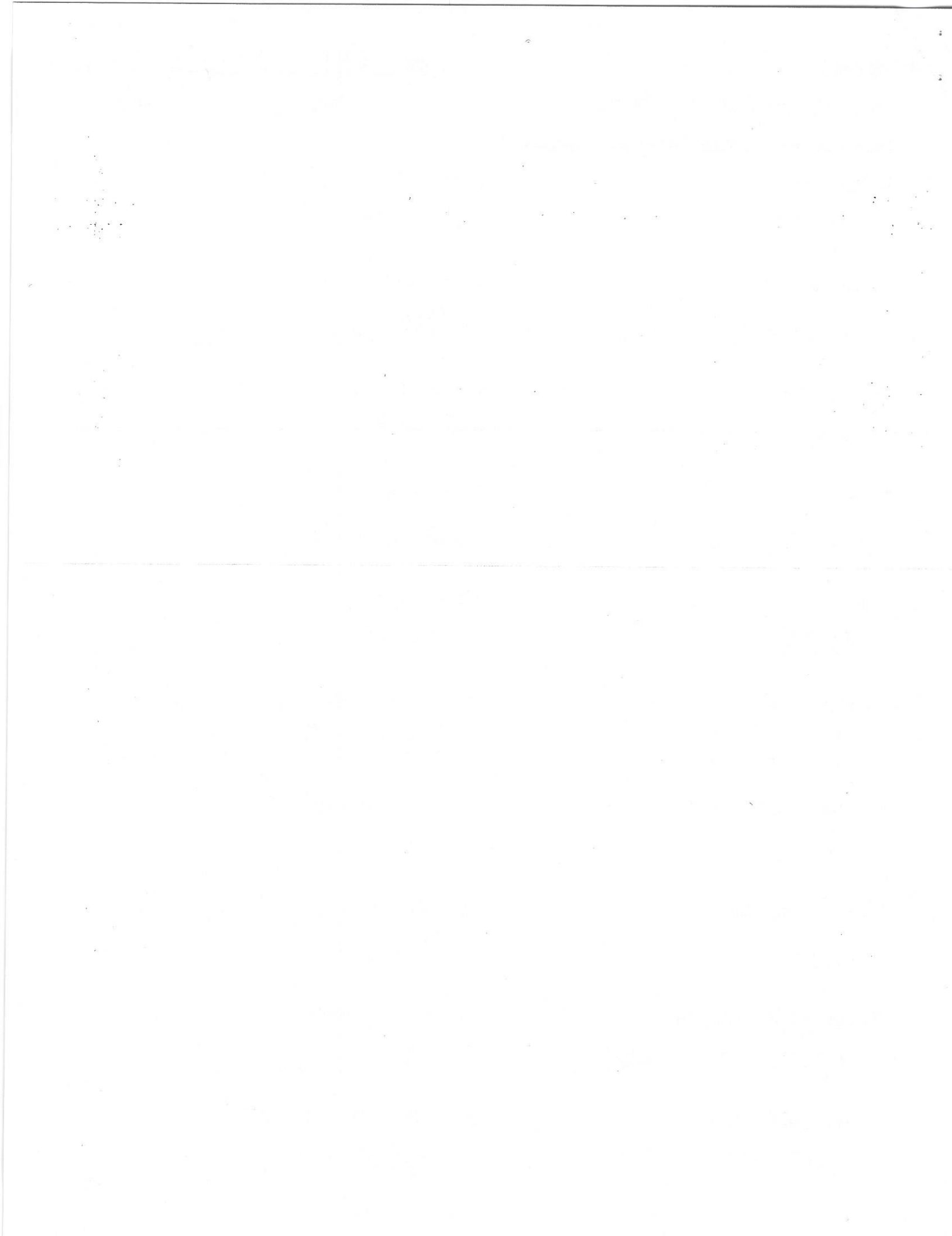
$-x(x^3 - 7x^2 - 6x - 1)$

19) $15k^4 + 9k^3 + 15k^2 + 21$

$3(5k^4 + 3k^3 + 5k^2 + 7)$

20) $-64k^4 - 64k^3 - 64k^2 - 56k$

$-8k(8k^3 + 8k^2 + 8k + 7)$



ALGEBRA I
INTRODUCTION TO FACTORING WORKSHEETS

<i>Sum</i>	<i>Product</i>	<i>Factors</i>
8	15	5, 3
6	9	3, 3
2	-15	5, -3
0	-25	-5, 5
-20	99	-9, -11
8	16	4, 4
-2	-35	-7, 5
0	-4	-2, 2
-4	-5	-5, 1
1	-20	5, -4
4	-21	7, -3
1	-2	2, -1
-17	72	-9, -8
-2	1	-1, -1
11	30	5, 6
4	-32	8, -4
-17	66	-6, -11
7	12	4, 3

ALGEBRA I
INTRODUCTION TO FACTORING WORKSHEETS

<i>Sum</i>	<i>Product</i>	<i>Factors</i>
5	6	2, 3
-4	4	-2, -2
-7	10	-5, -2
-6	9	-3, -3
-10	25	-5, -5
-8	15	-5, -3
-6	8	-4, -2
-1	-6	-3, 2
6	-40	10, -4
-10	-200	-20, 10
2	-15	5, -3
1	-12	4, -3
-2	-48	-8, 6
3	-18	6, -3
1	-56	8, -7
-15	56	-8, -7
-3	-54	-9, 6
4	3	3, 1