

130 WORKSHEET (4.2)

Name _____

Use the digits 0 – 9 and the number K634K0 to answer the following questions. Explain why your selection of digits to substitute for K works.

1. What values of K will make this number divisible by 2?
Since the number K634K0 ends in 0—it is an even number for any value of K. Thus, K = 0, 1, 2, 3, 4, 5, 6, 7, 8, or 9.
2. What values of K will make this number divisible by 3?
3. What values of K will make this number divisible by 4?
4. What values of K will make this number divisible by 5?
5. What values of K will make this number divisible by 6?
6. What values of K will make this number divisible by 9?

7. What values of K will make this number divisible by 10?

8. What values of K will make this number divisible by 3 but not by 9?

9. What values of K will make this number divisible by 3 but not by 6?

GAME: FACTOR OUT

1	2	3	4	5	6	7	8	9	10
11	12	13	14	15	16	17	18	19	20
21	22	23	24	25	26	27	28	29	30
31	32	33	34	35	36	37	38	39	40
41	42	43	44	45	46	47	48	49	50

DIRECTIONS:

1. Decide who will go first. The first player marks the numbers with circles and the second player marks the numbers with squares.
2. Players take turns picking a number and marking the number and all of its factors (that have not already been marked). The game is over when every number has been marked.
3. The winner is the player whose marked numbers have the greater sum.

