

Name:

Divisibility Rules

❖ A number is divisible by **2** if the last digit is **even**.

❖ A number is divisible by **3** if, when you add up the digits in the number, **the sum is a multiple of 3** (3 divides evenly into the sum).

249: $2 + 4 + 9 = 15$ (3 divides evenly into 15). So, 249 is divisible by 3.

347: $3 + 4 + 7 = 14$ (3 does NOT divide evenly into 15). So, 347 is NOT divisible by 3.

❖ A number is divisible by **4** if the **last TWO digits of the number are multiple of 4** (4 divides evenly into the last two digits).

148: The last two digits (48) is a multiple of 4 (4 divides evenly into 48).

So, 148 is divisible by 4.

281: The last two digits (81) is NOT a multiple of 4 (4 does NOT divide evenly into 48).

So, 281 is not divisible by 4.

❖ A number is divisible by **5** if the **last digit is a 0 or 5**.

❖ A number is divisible by **6** if it is **divisible by 2 and 3**.

❖ A number is divisible by **8** if the **last THREE digits of the number are multiple of 8** (8 divide evenly into the last three digits).

4,160: The last three digits (160) is a multiple of 8 (8 divides evenly into 160).

So, 4,160 is divisible by 8.

6,281: The last three digits (281) is NOT a multiple of 8 (8 does NOT divide evenly into 281).

So, 6,281 is not divisible by 8.

❖ A number is divisible by **9** if, when you add up the digits in the number, **the sum is a multiple of 9** (9 divides evenly into the sum).

279: $2 + 7 + 9 = 18$ (9 divides evenly into 18). So, 279 is divisible by 9.

447: $4 + 4 + 7 = 15$ (9 does NOT divide evenly into 15). So, 447 is NOT divisible by 9.

❖ A number is divisible by **10** if the last digit is a 0.