

Divisibility & Remainders

Practice — ANSWER KEY

Digit-sum tricks and sharing problems.

Think: For 3 and 9: add up the digits. If the digit sum divides, the number divides.

1. Answers with the thinking.

- 1) Is 47 divisible by 3? Use the digit-sum trick. **no**

↳ digits add to 11; 11 is not divisible by 3

- 3) What is the remainder of $88 \div 5$? **3**

↳ $5 \times 17 = 85$

- 5) 32 marbles are shared equally among 6 friends. How many marbles are LEFT OVER? **2**

↳ each friend gets 5

- 7) 51 marbles are shared equally among 6 friends. How many marbles are LEFT OVER? **3**

↳ each friend gets 8

- 9) Is 121 divisible by 3? Use the digit-sum trick. **no**

↳ digits add to 4; 4 is not divisible by 3

- 11) 49 marbles are shared equally among 4 friends. How many marbles are LEFT OVER? **1**

↳ each friend gets 12

- 2) What is the remainder of $65 \div 5$? **0**

↳ $5 \times 13 = 65$

- 4) 55 marbles are shared equally among 5 friends. How many marbles are LEFT OVER? **0**

↳ each friend gets 11

- 6) 12 marbles are shared equally among 3 friends. How many marbles are LEFT OVER? **0**

↳ each friend gets 4

- 8) What is the remainder of $26 \div 9$? **8**

↳ $9 \times 2 = 18$

- 10) 56 marbles are shared equally among 5 friends. How many marbles are LEFT OVER? **1**

↳ each friend gets 11

- 12) 45 marbles are shared equally among 8 friends. How many marbles are LEFT OVER? **5**

↳ each friend gets 5