

Key Concept and Vocabulary

A whole number is divisible by

- 2: if the number is even.
- 3: if the sum of the digits is divisible by 3.
- 5: if the ones digit is 0 or 5.
- 6: if the number is even and divisible by 3.
- 9: if the sum of the digits is divisible by 9.
- 10: if the ones digit is 0.



Skill Examples

1. 48 is divisible by 3 because $4 + 8 = 12$ is divisible by 3.
 ❖ So, 3 is a factor of 48.
2. 243 is divisible by 9 because $2 + 4 + 3 = 9$ is divisible by 9.
 ❖ So, 9 is a factor of 243.

Application Example

3. There are 127 chairs in the lunch room. Can you arrange the chairs into 5 equal rows?
 The ones digit of 127 is not 0 or 5, it is 7.
 ❖ No, you cannot arrange the chairs into 5 equal rows.



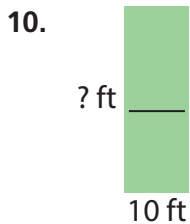
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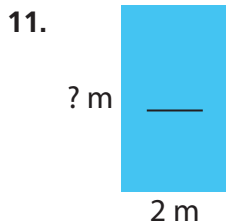
Use a divisibility test to answer the question.

4. Is 34 divisible by 2? _____
5. Is 79 divisible by 6? _____
6. Is 170 divisible by 10? _____
7. Is 5 a factor of 55? _____
8. Is 9 a factor of 81? _____
9. Is 3 a factor of 952? _____

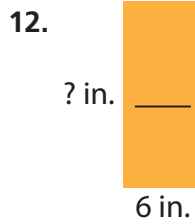
Determine whether the length of the missing side of the rectangle is a whole number.



Area = 505 square feet



Area = 65 square meters



Area = 306 square inches

13. **CHARITY** A game show contestant wins \$975. Can he divide his winnings equally among 9 different charities? Explain. _____
14. **SHARING TIME** A family of 3 people share a total of 270 cell phone minutes each month. Can each person use the same number of minutes each month? If so, how many?
