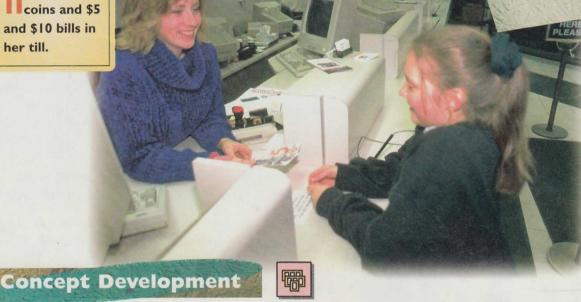


## Divisibility Rules for 2, 5, and 10

Aarti said that if a whole number ends in 5, and you divide it by 5, your answer always an odd number. Do you agree? Give examples to support your opinion

Warm Up

bank teller has only \$2 coins and \$5 and \$10 bills in her till.



- 1. For which of these amounts can the teller give exact change, using only one kind of money, a \$2 coin, a \$5 bill, or a \$10 bill? Explain.
  - a) \$32
- **b)** \$40
- c) \$560

- **d)** \$65
- e) \$345
- n \$3005
- 2. For which of these amounts could you make change using only \$2 coins? Explain.
  - a) \$270
- **b)** \$372
- c) \$484

- **d)** \$1566
- e) \$2058
- n \$3059
- 3. A number is divisible by another number if there is no remainder when you divide.
  - a) Do the numbers that are divisible by 2 only end in 0, 2, 4, 6, or 8?
  - b) Is it necessary to check the other digits? Why or why not?

- 4. For which amounts could you make change using only \$10 bills? Explain.
  - **a)** \$970 **b)** \$205
- c) \$1644
- **d)** \$4350
- **5.** Do the numbers that are divisible by 10 only end in 0?
- 6. a) For which amounts in Problem 4 could you make change using only \$5 bills?
  - **b)** Do the numbers that are divisible by 5 only end in 0 or 5?
- **7.** A number is divisible by 2 and 5. What is the ones digit?
- 8. An amount of money has a ones digit of zero. How much will be left over if you change it for \$2 coins? \$5 bills? \$10 bills?

## **Understand and Apply**

- 1. What is the ones digit of a number if it is
  - a) 2 more than a multiple of 5?
  - **b)** 1 more than a multiple of 2?
  - c) 6 more than a multiple of 10?
- 2. A bag of marbles can be evenly divided among 2, 5, or 10 friends. What is the smallest number **E** of marbles the bag can contain?