Read this information. Then answer questions 1 and 2.

Winnifred has a function machine that works in such a way that when she puts in a 12, a 6 comes out. When she puts in a 6, a 3 comes out, and when she puts in a 2, a 1 comes out.



- 1. What rule does Winnifred's machine use?
 - A. It subtracts 9.
- B. It divides by 2.
- C. It divides by 4.
- D. It multiplies by 2.

- 2. If Winnifred puts in an 8, what number will come out?
- 3. Lois has 40 iris and tulip bulbs in her flower bed. If 25 of the bulbs are tulips, what is the ratio of iris bulbs to tulip bulbs in her flower bed?
- 4. The grasshopper jumped 25 cm. How many millimeters is that?
- 5. The length of segment AB is 3.7 cm. Segment BC is 2.2 cm long. The length of segment CD equals the length of segment BC. Find the length of segment AD.

- **6.** (a) A pint is what fraction of a quart?
 - (b) A quart is what fraction of a gallon?
 - (c) Use the answers from (a) and (b) above to determine what fraction of a gallon a pint represents.
- 7. Estimate the product of 496 and 351.
- 8. Write this decimal number in simplest form: 0400.203000
- **9.** What is the reciprocal of $\frac{6}{13}$?
- 10. Reduce $4\frac{5}{15}$.

17.
$$5 - \left(5\frac{1}{3} - 2\frac{2}{3}\right)$$

19.
$$\frac{9}{13} + \frac{7}{13}$$

14.
$$20 \times 16\phi$$

18.
$$\frac{2}{7} \div \frac{4}{5}$$

20.
$$\frac{2}{3} \times 6$$