

## Additional Practice 5-2

### Estimate Quotients with 2-Digit Divisors

#### Another Look!

Frog Trail is 1,976 meters long. Shondra walks 43 meters of the trail each minute. About how many minutes will it take Shondra to walk the trail?

Find compatible numbers. Think of a basic fact. Then use place-value patterns.

$$1,976 \div 43$$

$$\begin{array}{c} \downarrow \quad \downarrow \\ 2,000 \div 40 = 50 \end{array}$$

2,000  $\div$  40 = 50, so  
1,976  $\div$  43 is about 50.

It would take Shondra about 50 minutes.

You can use a basic fact and place-value patterns.



**Leveled Practice** In 1–3, fill in the blanks to find the estimates.

**Sample answers are given.**

1.  $1,769 \div 23$   
 $\downarrow \quad \downarrow$   
 $1,800 \div \boxed{20} = \boxed{90}$

2.  $516 \div 48$   
 $\downarrow \quad \downarrow$   
 $500 \div \boxed{50} = \boxed{10}$

3.  $891 \div 32$   
 $\downarrow \quad \downarrow$   
 $\boxed{900} \div \boxed{30} = \boxed{30}$

In 4–15, estimate using compatible numbers.

4.  $241 \div 34$  **8**

5.  $705 \div 11$  **70**

6.  $7,968 \div 22$  **400**

7.  $5,624 \div 72$  **80**

8.  $1,043 \div 23$  **50**

9.  $986 \div 12$  **100**

10.  $642 \div 94$  **7**

11.  $4,870 \div 58$  **80**

12.  $5,721 \div 79$  **70**

13.  $148 \div 51$  **3**

14.  $9,073 \div 11$  **900**

15.  $3,514 \div 58$  **60**



- 16. Critique Reasoning** Meredith says "Since 1 times 1 equals 1, then 0.1 times 0.1 equals 0.1." Do you agree? Explain your reasoning.

**No; sample explanation:**

**$1 \times 0.1 = 0.1$ ; since 0.1 is one tenth of 1,  $0.1 \times 0.1 = 0.01$ .**

- 17. enVision® STEM** A gray whale traveled 152 kilometers in one day. The whale swam between 7 and 8 kilometers each hour. About how many hours did it take the whale to swim the distance? Show two different ways that you can use compatible numbers to find an answer. Then solve. **Sample answers:  $160 \div 8$  or  $140 \div 7$ ; About 20 hours**

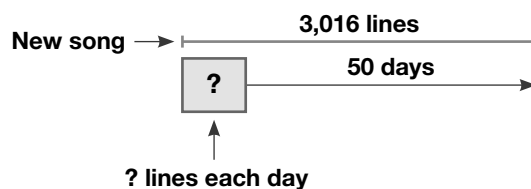
- 18.** Meg wants to find about how many phones the company activated in one minute. Explain why Meg can use  $15,000 \div 50$  to find the answer.

**An estimate is enough. So  $15,000 \div 50$  can be used since it is close to  $14,270 \div 50$ .**

DATA	Clear Connect Company
	phones activated: 14,270 in 50 minutes
	calls made: 59,835
	text messages sent: 2,063

- 19. Higher Order Thinking** Ester's choir wants to learn a new song for the school concert in 7 weeks. The song has 3,016 lines. The choir learns an equal number of lines each day. About how many lines do they need to learn each day to learn the song in time for the concert? Explain.

**Sample answer: About 60 lines; Use compatible numbers to estimate  $3,000 \div 50 = 60$ .**



7 weeks is about 50 days.



### Assessment Practice

- 20.** Mr. Crane's farm is 593 acres. He divides the farm into 32 equal parts. Which is the best estimate of the number of acres in each part?

- (A) 10 acres
- (B) 20 acres
- (C) 100 acres
- (D) 200 acres

- 21.** A scientist counted 3,921 total eggs in 49 sea turtle nests. Each nest had about the same number of eggs. Which is the best estimate of the number of eggs she counted in each nest?

- (A) 800 eggs
- (B) 100 eggs
- (C) 80 eggs
- (D) 10 eggs