Name: ..... Class: .....

Estimate quotients: 2-digit divisors

Write an expression that will give a better compatible number estimate for the following.
Use the expression you've given to estimate the quotient.

1. 213 ÷ 11	**2.** 100 ÷ 10	**3.** 326 ÷ 12
4. 224 ÷ 12	**5.** 121 ÷ 11	**6.** 520 ÷ 13
7. 314 ÷ 14	**8.** 412 ÷ 13	**9.** 450 ÷ 15
10. 320 ÷ 10	**11.** 512 ÷ 14	**12.** 565 ÷ 14
13. 336 ÷ 13	**14.** 228 ÷ 12	**15.** 1800 ÷ 18

16. 540 ÷ 49	**17.** 540 ÷ 10	**18.** 120 ÷ 10
19. 550 ÷ 25	**20.** 700 ÷ 20	**21.** 630 ÷ 12
22. 224 ÷ 12	**23.** 270 ÷ 19	**24.** 872 ÷ 19
25. 336 ÷ 13	**26.** 555 ÷ 11	**27.** 342 ÷ 12
28. 747 ÷ 29	**29.** 758 ÷ 17	**30.** 650 ÷ 35

Solution

Name: ..... Class: .....

Estimate quotients: 2-digit divisors

Write an expression that will give a better compatible number estimate for the following.
Use the expression you've given to estimate the quotient.

1. 213 ÷ 11

Let's first of all think of 2 definite compatible numbers that can give 2 different estimates of 213 ÷ 11

213 ÷ 11 ⟶ 200 ÷ 10

213 ÷ 11 ⟶ 220 ÷ 10

Secondly, let's find the better compatible number estimate.
You will see that 200 ÷ 10 is close to 213 ÷ 11.
So, 200 ÷ 10 is a better compatible number to estimate 213 ÷ 11.
Finally, we will use 200 ÷ 10 to estimate the quotient.

$$\frac{200}{10} = \frac{20 \times 10}{10 \times 1} = 20$$

So, 213 ÷ 11 is approximately equal to 20.

16. 540 ÷ 49

Let's first of all think of 2 definite compatible numbers that can give 2 different estimates of 540 ÷ 49

540 ÷ 49 ⟶ 600 ÷ 50

540 ÷ 49 ⟶ 550 ÷ 50

Secondly, let's find the better compatible number estimate.
You will see that 550 ÷ 50 is close to 540 ÷ 49.
So, 550 ÷ 50 is a better compatible number to estimate 540 ÷ 49.
Finally, we will use 550 ÷ 50 to estimate the quotient.

$$\frac{550}{50} = \frac{11 \times 50}{50 \times 1} = 11$$

So, 540 ÷ 49 is approximately equal to 11.