

Using Compatible Numbers to Estimate

Use compatible numbers to estimate 24×36 .

Remember, compatible numbers are numbers that are easy to multiply.

Step 1

Pick compatible numbers.

- 24 is close to 25.
- 36 is close to 40.

$$\begin{array}{r} 24 \times 36 \\ \downarrow \quad \downarrow \\ 25 \times 40 \end{array}$$

Step 2

Multiply the compatible numbers.

$$25 \times 40 = 1,000$$

So, 24×36 is about 1,000.

Estimate to find each product.

1. 23×12

23 is close to 25.

12 is close to _____.

$$25 \times \underline{\hspace{2cm}} = \underline{\hspace{2cm}}$$

2. 24×31

24 is close to 25.

31 is close to _____.

$$\underline{\hspace{2cm}} \times \underline{\hspace{2cm}} = \underline{\hspace{2cm}}$$

3. 42×26

42 is close to _____.

26 is close to _____.

$$\underline{\hspace{2cm}} \times \underline{\hspace{2cm}} = \underline{\hspace{2cm}}$$

4. 63×59

63 is close to _____.

59 is close to _____.

$$\underline{\hspace{2cm}} \times \underline{\hspace{2cm}} = \underline{\hspace{2cm}}$$

5. $19 \times 24 = \underline{\hspace{2cm}}$

6. $51 \times 17 = \underline{\hspace{2cm}}$

7. $82 \times 78 = \underline{\hspace{2cm}}$

8. $24 \times 61 = \underline{\hspace{2cm}}$

9. $48 \times 29 = \underline{\hspace{2cm}}$

10. $53 \times 39 = \underline{\hspace{2cm}}$

11. There are 27 offices on each floor of a skyscraper. About how many offices are on 32 floors?

12. Yoko estimates that the product of 48 and 53 is 250. Is that reasonable? Why or why not?
