Homework Helper

Find \( 26 \times 25 \).

An area model can be used to represent the factors. The tens and ones of one factor are separated.

Find each product. Then add.

\[
26 \times 25 = 26 \times (20 + 5)
\]
\[
= (26 \times 20) + (26 \times 5)
\]
\[
= 520 + 130
\]
\[
= 650
\]
So, \( 26 \times 25 = 650 \).

Practice

Draw an area model. Then use the Distributive Property to find each product.

1. \( 73 \times 34 = \) \[
73 \times 34 = 73 \times (30 + 4)
\]
\[
= (73 \times 30) + (73 \times 4)
\]
\[
= \quad + \quad
\]
\[
= \quad
\]

2. \( 82 \times 22 = \) \[
82 \times 22 = 82 \times (20 + 2)
\]
\[
= (82 \times 20) + (82 \times 2)
\]
\[
= \quad + \quad
\]
\[
= \quad
\]
Draw an area model. Then use the Distributive Property to find each product.

3. \(18 \times 39 = \underline{\hphantom{100}}\)

\[
18 \times 39 = \underline{\hphantom{100}} \times (\underline{\hphantom{10}} + \underline{\hphantom{10}})
\]

\[
= (\underline{\hphantom{100}} \times \underline{\hphantom{10}}) + (\underline{\hphantom{100}} \times \underline{\hphantom{10}})
\]

\[
= \underline{\hphantom{100}} + \underline{\hphantom{100}}
\]

\[
= \underline{\hphantom{100}}
\]

4. There are 48 nails in one box. How many nails are in 17 boxes?

\[
\text{______ nails}
\]

\[
17 \times 48 = \underline{\hphantom{100}} \times (\underline{\hphantom{10}} + \underline{\hphantom{10}})
\]

\[
= (\underline{\hphantom{100}} \times \underline{\hphantom{10}}) + (\underline{\hphantom{100}} \times \underline{\hphantom{10}})
\]

\[
= \underline{\hphantom{100}} + \underline{\hphantom{100}}
\]

\[
= \underline{\hphantom{100}}
\]

5. Each notebook has 64 pages. How many total pages are there in 33 notebooks?

\[
\text{______ pages}
\]

\[
33 \times 64 = \underline{\hphantom{100}} \times (\underline{\hphantom{10}} + \underline{\hphantom{10}})
\]

\[
= (\underline{\hphantom{100}} \times \underline{\hphantom{10}}) + (\underline{\hphantom{100}} \times \underline{\hphantom{10}})
\]

\[
= \underline{\hphantom{100}} + \underline{\hphantom{100}}
\]

\[
= \underline{\hphantom{100}}
\]

6. Each jar contains 55 buttons. There are 16 jars on the shelf. How many buttons are there altogether?

\[
\text{______ buttons}
\]