



Use mental math to solve the following problems. Explain your strategies.

1. Brady's dad is planning a special trip to Chicago and wants to get tickets for a Chicago Bears' football game. When the Bears play the NY Giants, he can get tickets on the 35-yard line for \$70 each. How much will it cost for Brady's dad to buy five tickets for the family?

To determine how much it will cost to buy 5 tickets at \$70 each, multiply 5 times 70.

Possible Reasoning:

Think of 70 as 7 tens. \longrightarrow $5 \times 70 = 5 \times 7 \text{ tens}$

5 groups of 7 tens equals 35 tens. \longrightarrow $= 35 \text{ tens}$

35 tens is the same as 350. \longrightarrow $= 350$

It will cost \$350 dollars to buy five tickets to the game.

2. Carrie loves the Minnesota Vikings. Her uncle, Bill, lives in Chicago and is going to take her to a Bears vs. Vikings football game when she is visiting with her family. Uncle Bill got ninth row tickets for \$250 each. If Uncle Bill bought 4 tickets, how much did he spend?

To determine how much it will cost to buy 4 tickets at \$250 each, multiply 4 times 250.

Possible Reasoning:

Think of 250 as 25 tens. \longrightarrow $4 \times 250 = 4 \times 25 \text{ tens}$

4 groups of 25 tens equals 100 tens. \longrightarrow $= 100 \text{ tens}$

100 tens is the same as 1000. \longrightarrow $= 1000$

It will cost \$1000 dollars to buy four tickets to the game.

3. Park Valley Ice Club received a donation of \$560. The donation is to be used to buy deserving young skaters tickets to a professional ice show. The club decided to attend High School Musical: The Ice Tour, where the tickets cost \$70 each. How many young skaters can attend the show because of the very generous donation?

To determine the number of tickets, divide \$560 by \$70.

Possible Reasoning:

Think of 560 as 56 tens and 70 as 7 tens. \longrightarrow $560 \div 70 = 56 \text{ tens} \div 7 \text{ tens}$

56 tens divided by 7 tens is 8. \longrightarrow $= 8$

Eight skaters can attend the show for free.



4. Cedar Lane Middle School is preparing information packets for a parents' meeting. Each packet has 25 pages. How many packets can the school make with 12,000 sheets of paper?

To determine the number of packets, divide 12,000 by 25.

Possible Reasoning:

It is easier to divide by 100 than 25, so determine the number of packets the school can make if each packet is 100 pages. $\longrightarrow 12,000 \div 100 = 120$

Since the school can make 4 packets with 100 sheets of paper, multiply by 4. $\longrightarrow 4 \times 120 = 480$

The school can make 480 packets with 12,000 sheets of paper.

5. Mr. Otto is setting up folding chairs for tonight's band concert. There are 30 chairs in each row. He has room to set up 12 rows. How many chairs will he have?

To determine the number of chairs, multiply 12 times 30.

Possible Reasoning:

Think of 30 as 3 tens. $\longrightarrow 12 \times 30 = 12 \times 3 \text{ tens}$

12 groups of 3 tens equals 36 tens. $\longrightarrow = 36 \text{ tens}$

36 tens is the same as 360. $\longrightarrow = 360$

Mr. Otto will set up 360 chairs for the band concert.

6. The Middletown Library is packaging used books to send to a library whose books were destroyed in a flood. Middletown Library would like to send 300 books. Five shipping boxes are available and the librarian wants to place the same number of books in each box. How many books should the librarian put in a box?

To determine the number of books in each box, divide 300 by 5.

Possible Reasoning:

Think of 300 as 30 tens. $\longrightarrow 300 \div 5 = 30 \text{ tens} \div 5$

30 tens divided by 5 is 6 tens. $\longrightarrow = 6 \text{ tens}$

6 tens is the same as 60. $\longrightarrow = 60$

The librarian can place 60 books in each box.