

Learning Plan 1

Chapter 1

Question 6

(more info on pages 4-6 in the textbook)

Estimate the problem by front end rounding. Then find the exact answer.

$$\begin{array}{r} 723 \\ \times 47 \\ \hline \end{array}$$

Solution

The front end rounding requires the first digit to be rounded and all the following digits to be changed to zero.

Round 723 to 700.

Round 47 to 50.

$$700 \times 50 = 35,000$$

The actual product is:

$$723 \times 47 = 33,981$$

Question 8

Rewrite the number in words.

26,874,500

Solution

Twenty-six million, eight hundred seventy-four thousand, five hundred.

Question 14

The cost per night at hotel A is \$162, and the cost per night at Hotel B is \$89. Find the amount saved on a five-night stay at Hotel B instead of Hotel A.

Solution:

Five-night stay at Hotel A	Five-night stay at Hotel B
$\$162 \cdot 5 = \810	$\$89 \cdot 5 = \445
Amount Saved:	
$\$810 - \$445 = \$365$	

Question 15

Use the front end rounding to estimate the answer. Then find the actual product.

$$58.73 \times 6.5$$

Solution:

The front end rounding requires the first digit to be rounded and all the following digits to be changed to zero.

Round 58.73 to 60.

Round 6.5 to 7.

$$60 \times 7 = 420$$

The actual product:

$$58.73 \times 6.5 = 381.745$$

Question 16

Find the total cost of ordering six long-sleeve, solid-color shirts and three short-sleeve, striped shirts, all size XXL and all shipped to the home.

Shirt Ordering Information	Total Price of all items (Excluding Monograms and Gift Boxes)	Shipping, Packing, and Handling
Short sleeve, solid colors \$11.25 each	\$0 – 25.00	\$4.00
Short sleeve, stripes \$16.75 each	\$25.01 - \$65.00	\$5.85
Long Sleeve, solid colors \$ 8.95	\$65.01 - \$125.00	\$7.95
Long sleeve, stripes \$21.95 each	\$125+	\$9.95
XXL size, add \$2 per shirt	Shipping to each additional address add \$4.25	
Monogram, \$4.95 each		
Gift box, \$6 each.		

Solution:

The information we need from the left side table is:

Long Sleeve, solid colors \$ 8.95
Short sleeve, stripes \$16.75 each
XXL size, add \$2 per shirt

We need XXL size, so each shirt will increase in price by \$2.

$$8.95 + 2 = 10.95$$
$$16.75 + 2 = \$18.75$$

The cost of six Long Sleeve, solid colors is:

$$6 \cdot 10.95 = \$65.7$$

The cost of three Short sleeve, stripes is:

$$3 \cdot 18.75 = \$56.25$$

The total cost of all the items is:

$$\$65.7 + \$56.25 = \$121.95$$

From the right side table the shipping price will be \$7.95.

Add the shipping price to the total cost:

$$121.95 + 7.95 = \text{\$129.90}$$

Question 17

Find the gross pay of an employee working 31.9 hours at a rate of \$13.45 per hour and 7.23 hours at a rate of \$14.29 per hour. Round to the nearest cent as needed.

Solution

$$31.9 \cdot 13.45 + 7.23 \cdot 14.29 = 532.3717 \\ \approx 532.37$$

Rounding to the nearest cent is the same as rounding to the nearest hundredth.

Question 18

Write the decimal in words.

4.61

Solution

Four and sixty-one hundredths.

Question 19

Round 4.2763 to the nearest hundredth.

Solution

4.2763 rounded to the nearest hundredth is 4.28