

1. Some large envelopes are 0.085 cm thick. How thick is a stack of 100 envelopes packed on top of each other?

0.085

- (A) 0.85 cm      (C) 85 cm  
(B) 8.5 cm      (D) 850 cm

2. Every school day, Dylan rides the school bus 4.79 miles round trip between home and school.

**Part A**

Estimate the total distance Dylan rode the school bus last month, when there were 21 school days. Write an equation to model your work.

4.79 → 5      5 × 20 = 100  
21 → 20      about 100 miles

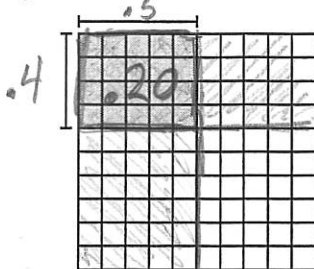
**Part B**

Find the actual total distance Dylan rode the bus last month.

100.59 miles

②  
1 1  
4.79  
× 21  
-----  
9580  
479  
-----  
100.59

- ② 3. Caden colored in the decimal grid shown below. Which expression shows the area of the grid Caden colored?



- (A)  $0.04 \times 0.05$       (C)  $0.4 \times 0.5$   
(B)  $0.04 \times 0.5$       (D)  $0.4 \times 0.05$

$\frac{4}{10}$  of  $\frac{5}{10} = \frac{20}{100}$

4. Match each expression on the left with its product on the right.

6 × 5 tenths = 30 tenths

6 × 0.5 → 30

Tenths × tenths = hundredths

0.6 × 0.5 → 0.3 = .30

300 tenths

60 × 0.5 → 0.03

0.06 × 0.5 → 3 = 30 tenths

3 decimal places

5. Ava bought 5.8 pounds of tomatoes at a farmer's market. The price of the tomatoes was \$1.30 per pound.

**Part A**

What are the partial products of  $5.8 \times 1.30$ ? Show your work.

5	$5 \times 1 = 5$	$5 \times .3 = 1.5$	
.8	$.8 \times 1 = .8$	$.8 \times .3 = .24$	

1      .3

5.00  
1.50  
  .80  
  .24  
-----  
7.54

**Part B**

How much did Ava spend in all?

\$ 7.54

6. Choose all the expressions that are equal to  $0.48 \times 0.3$ .

- $\frac{48}{100} \times \frac{3}{100}$
- $\frac{3}{10} \times \frac{48}{100}$       .30 = .3
- $\frac{48}{100} \times \frac{30}{100}$        $\frac{30}{100} = \frac{3}{10}$
- $\frac{3}{100} \times \frac{48}{100}$
- $\frac{48}{100} \times \frac{3}{10}$

2.54

14. One inch equals 2.54 centimeters. How many centimeters is 10 inches?

25.4 cm

15. A bowling alley charges \$185 per hour for parties. How much would a 2.5-hour party cost?

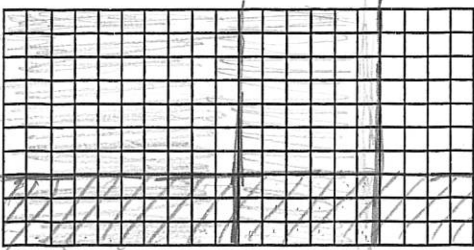
\$462.50

$$\begin{array}{r}
 185 \\
 \times 2.5 \\
 \hline
 925 \\
 3700 \\
 \hline
 462.5
 \end{array}$$

16. A forest preserve has an area of 1.6 square miles, and 0.3 of the forest preserve is open for hiking.

Part A

Shade the grid to model the multiplication.



$$\begin{array}{r}
 .3 \\
 \times 1.6 \\
 \hline
 .48
 \end{array}$$

Part B

How many square miles are open for hiking? Show your work.

.48

Part C

How does the model help you to find the product?

It shows what  $\frac{3}{10}$  of 1.6 looks like. It's on a fraction of it.

21. Sara is buying party supplies.

Paddle Ball	\$0.89
Balloon	\$2.99
Banner	\$4.99

$$\begin{array}{r}
 2.99 \\
 \times 5 \\
 \hline
 14.95
 \end{array}$$

Part A

How much will 5 balloons cost? Write an equation.

\$14.95

Part B

Sara wants to buy 15 paddle balls. She uses partial products to find her total. She says, "\$25.50 is much more than my estimate of  $15 \times \$1 = \$15$ , so my estimate is too low." Do you agree? Explain.

15 Paddle balls @ \$0.89 each	9.0
$10 \times 0.9 = 9$	$10 \times .09 = .9$
$10 \times 0.8 = 8$	
$5 \times 0.9 = 4.5$	$5 \times .09 = 0.45$
$5 \times 0.8 = 4$	4.0
$\$9 + \$8 + \$4.50 + \$4 = \$25.50$	
	\$14.35

Her estimate is correct - her actual amount is wrong. She used .9 instead of .09 so two of the partial products are too big. Correct actual \$14.35