

# Unit 5 Study Guide Review

## Big Numbers, Estimation, and Computation

Name **Answer Key**\_\_\_\_\_

1. Circle to the number closest to the sum. Write a number model for the estimate.

$$221 + 254$$

600   **500**   400   300

Number model: 200 + 300 = 500

2. Circle to the number closest to the sum. Write a number model for the estimate.

$$594 + 518$$

1,200   **1,100**   1,000   1,300

Number model: 600 + 500 = 1,100

3. Circle the number that is closest to the sum. Write a number model for the estimate.

$$297 + 113 + 454$$

800   **900**   1,000   750

Number model: 300 + 100 + 500 = 900

# Answer Key

4. Circle the number that is closest to the sum. Write a number model for the estimate.

$$466 + 139 + 870$$

1,600    1,500    1,400    1,650

Number model:  $\underline{500 + 100 + 900 = 1,500}$

Multiply. Use the partial-products algorithm. Show your work.

5.  $41 * 5 = \underline{205}$

$$\begin{array}{r} 41 \\ \times 5 \\ \hline 200 \quad (40 * 5) \\ + 5 \quad (1 * 5) \\ \hline 205 \end{array}$$

6.  $35 * 4 = \underline{140}$

7.  $9 * 84 = \underline{756}$

8. Use the partial-products algorithm to multiply.  
 $588 * 2 = \underline{1,176}$

Multiply. Use the partial-products algorithm. Show your work.

9.  $39 * 18 = \underline{702}$

10.  $21 * 13 = \underline{273}$

11. Add.

a.  $9.1 + 1.1 = \underline{10.2}$

b.  $10.3 + 1.9 = \underline{12.2}$

12. Subtract.

a.  $10.72 - 8.27 = \underline{2.45}$

b.  $9.2 - 2.7 = \underline{6.5}$

# Answer Key

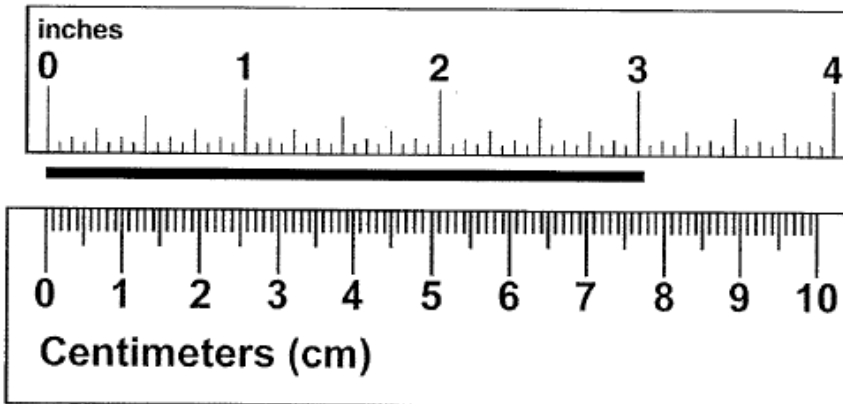
13. Add.  
 $18.75 + 6.32 = 25.07$

14. Explain the mistake that Hannah made when she solved this problem:

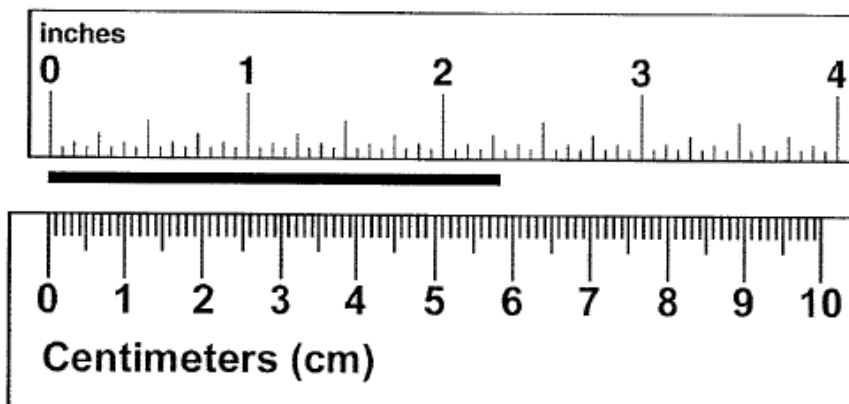
$$\begin{array}{r} 0.07 \\ - 0.6 \\ \hline 0.01 \end{array}$$

**Hannah didn't line up the decimals or put the larger number on top before she subtracted.  $0.60 - 0.07 = 0.53$**

15. a. How long is this line segment to the nearest  $\frac{1}{4}$  inch? **3 in.**  
b. How long is this line segment to the nearest half centimeter? **8 cm**

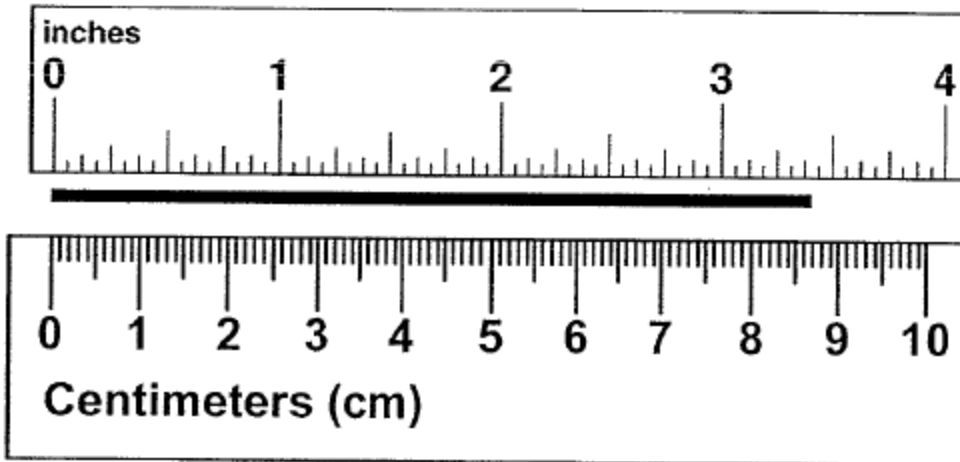


16. a. How long is this line segment to the nearest  $\frac{1}{4}$  inch? **2  $\frac{1}{4}$  in.**  
b. How long is this line segment to the nearest half centimeter? **6 cm**

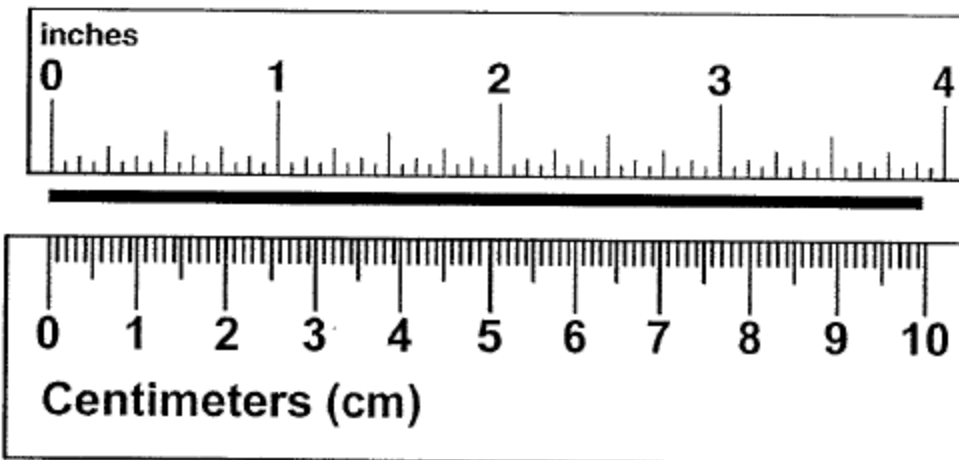


# Answer Key

17. a. How long is this line segment to the nearest  $\frac{1}{4}$  inch? **3  $\frac{1}{2}$  in.**  
b. How long is this line segment to the nearest half centimeter? **8.5 cm.**



18. a. How long is this line segment to the nearest  $\frac{1}{4}$  inch? **4 in.**  
b. How long is this line segment to the nearest half centimeter? **10 cm.**



# Answer Key

19. Complete the table.

Rule	in	out
$\times 6$	5	<b>30</b>
	<b>4</b>	24
	<b>7</b>	42
	6	<b>36</b>
	<b>8</b>	48
	2	<b>12</b>

20. Complete the table.

Rule	in	out
$\times 3$	3	<b>9</b>
	<b>8</b>	24
	<b>9</b>	27
	4	<b>13</b>
	<b>5</b>	15
	2	<b>6</b>

21. Complete the table.

Rule	in	out
$\times 70$	7	<b>490</b>
	<b>9</b>	630
	<b>2</b>	140
	5	<b>350</b>
	<b>6</b>	420
	3	<b>210</b>

# Answer Key

22. Complete the table.

Rule	in	out
$\times 50$	5	<b>250</b>
	<b>4</b>	200
	<b>3</b>	150
	9	<b>450</b>
	<b>2</b>	100
	8	<b>400</b>

23. Complete the table.

Rule	in	out
$\times 20$	7	<b>140</b>
	<b>8</b>	160
	<b>6</b>	120
	4	<b>80</b>
	<b>5</b>	100
	2	<b>40</b>

24. Find the rule and complete the table.

Rule	in	out
<b><math>\times 30</math></b>	9	<b>270</b>
	8	240
	5	150
	6	<b>180</b>
	<b>3</b>	90
	4	<b>120</b>

# Answer Key

25. Find the rule and complete the table.

Rule	in	out
<b>x 70</b>	4	<b>280</b>
	6	420
	3	210
	5	<b>350</b>
	<b>8</b>	560
	9	<b>630</b>

26. Estimate whether the the product will be in the tens, hundreds, thousands or more. Circle your choice. Write a number model to show how you got your estimate. Then calculate the exact answer.

$$27 * 67$$

10s	100s	<b>1,000s</b>	10,000s
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a. Number model:  **$30 \times 70 = 2,100$**

b. Exact answer: **1,809**

$$\begin{array}{r} 27 \\ \times 67 \\ \hline 1200 \text{ (20 x 60)} \\ 140 \text{ (20 x 7)} \\ 420 \text{ (60 x 7)} \\ + \underline{49} \text{ (7 x 7)} \\ \hline 1,809 \end{array}$$