

Unit 2 Study Guide

Estimation Strategies

Rounding is making a number simpler, but keeping its closest value. Numbers that have been rounded will always end in 0.

rounds down to 0					rounds up to 5				
0	1	2	3	4	5	6	7	8	9
10	11	12	13	14	15	16	17	18	19
20	21	22	23	24	25	26	27	28	29
30	31	32	33	34	35	36	37	38	39
40	41	42	43	44	45	46	47	48	49
50	51	52	53	54	55	56	57	58	59
60	61	62	63	64	65	66	67	68	69
70	71	72	73	74	75	76	77	78	79
80	81	82	83	84	85	86	87	88	89
90	91	92	93	94	95	96	97	98	99
rounds down to 0					rounds up to 5				

Compatible numbers that have "0" or "5" are easy to add or subtract and can be used as a compatible number.



Front-end estimation - keep the digit in the largest place value and then replace the remaining digits to 0.

$$\begin{array}{r} 4,183 \rightarrow 4,000 \\ + 1,428 \rightarrow 1,000 \\ \hline 5,000 \end{array}$$

Circle all the statements that are true.

A. $15 + 6 \neq 9 + 10$

B. $14 + 3 \neq 1 + 16$

C. $12 + 5 \neq 8 + 11$

D. $2 + 16 \neq 9 + 7$

Find the sum of 293 and 641.

- a. 834
- b. 844
- c. 934
- d. 944

**Use the numbers below to complete the sentence.
Make sure the statement is true.**

$$9 + 6 \neq \underline{\quad} + \underline{\quad}$$

2 3 4 7 8 9 10

Which symbol makes the number sentence correct?



Write the symbol in the box.

$$33 + 36 \boxed{} 57 - 12$$

359 is closest to –

A 300

B 350

C 400

D 450

Find the difference between 615 and 293.

- a. 322
- b. 382
- c. 482
- d. 908

Wesley's teacher wrote a subtraction problem on the white board.

$$\begin{array}{r} 390 \\ -125 \\ \hline \end{array}$$

Which is the best estimate of the difference?

- A 400 B 300 C 200 D 100**

Karen collected 678 stickers last summer. She collected 493 stickers this summer.

What is the best estimate of the number of stickers Karen has?

- ☐ **A** 900
- ☐ **B** 1,000
- ☐ **C** 1,100
- ☐ **D** 1,200

Mrs. Smith volunteered to work at the fall festival collecting hayride tickets. On Saturday, 368 people went for a hayride and on Sunday 412 went for a hayride. About how many tickets did Mrs. Smith collect on Saturday and Sunday?

- a. 700
- b. 760
- c. 780
- d. 800



Mary and Thomas both collect pencils. Mary had 338 pencils. Thomas has 1,129 pencils. How many more pencils does Thomas have?

- a. 1,467
- b. 1,457
- c. 811
- d. 791

Mrs. Ogle ate 35 tacos and Mr. Ogle ate 18 tacos.

Which strategy is the closest estimate to how many more tacos Mrs. Ogle ate than Mr. Holmes?

- A. $35 - 20 = 15$
- B. $40 - 20 = 20$
- C. $35 - 15 = 20$
- D. $40 - 15 = 25$