for some.

- You have 90 minutes to test, so USE YOUR TIME WISELY! If you don't understand a problem, skip it and try it again later.

- Please raise your hand if you have any questions on the semester test. The teacher can clarify a question if needed; however, the teacher is unable to provide any assistance on the semester test.

- When you are finished testing, please make sure your name is on the answer sheet, and raise your hand so the teacher can collect your work. (You need to hand in the semester test booklet, your answer sheet, scratch paper, and formula sheet.)

- Don't rush as you won't be allowed to use your computers or electronic devices in the duration of the class period.

Formula Sheet

- You are allowed to bring a formula sheet to the semester test

- Your formula sheet must be 1-sided, handwritten, on a page of white copy paper

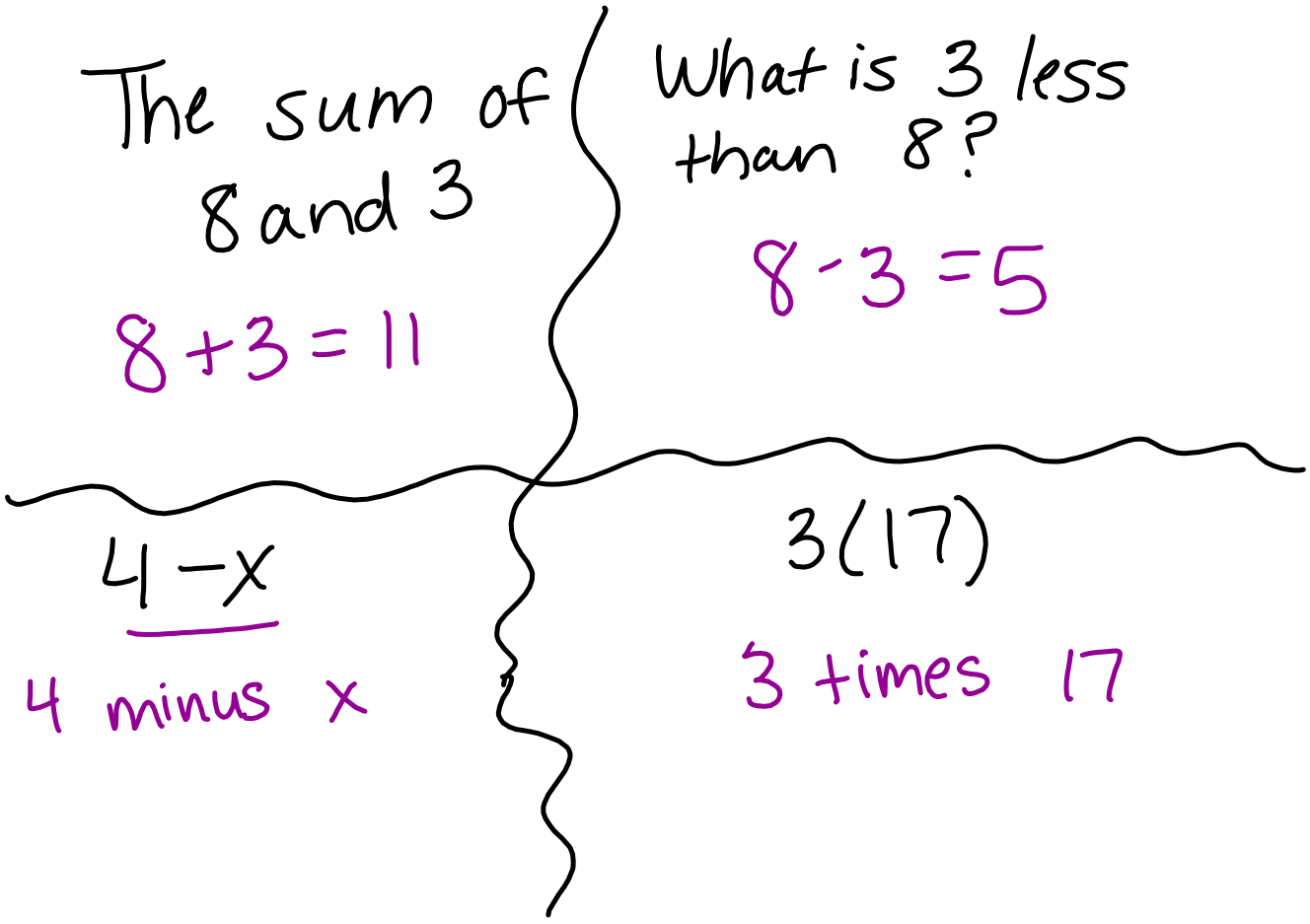
- You may put anything you'd like on your formula sheet--think about what would help you out the most

- NO photocopying or typing; the sheet must be in YOUR handwriting

- Formula sheets will be turned in at the end of the test

Write 2 words that represent each operation:

+	−	×	÷
add plus sum	minus subtract take away difference	multiply times product	divide quotient


The sum of 8 and 3
8 + 3 = 11
What is 3 less than 8?
8 - 3 = 5
4 - x
4 minus x
3(17)
3 times 17

Evaluate = solve

$cd+a$ when $a=5, c=3, d=7$

$3(7)+5 = 26$

$x - 20 = 14$

$+20 \quad +20$

$\boxed{x = 34}$

$17 - 3a = -4$

$-17 \qquad -17$

$\frac{-3a}{-3} = \frac{-21}{-3}$

$a = 7$

Jake has $20. If each book he wants to buy is $4, how many books can he buy?

$4x = 20$

$\boxed{x = 5 \text{ books}}$

$$-7 = \frac{d}{4} + 10$$
$$-10 \quad -10$$
$$4 \cdot -3 = \frac{d}{4} \cdot 4$$
$$\boxed{-12 = d}$$

$$13a - 10 = 8a + 5$$
$$-8a \quad -8a$$
$$5a - 10 = 5$$
$$+10 \quad +10$$
$$\frac{5a}{5} = \frac{15}{5}$$
$$\boxed{a = 3}$$

Solve for h

$$\frac{1 \cdot A = \frac{1}{2}bh}{\frac{1}{2} \cdot b \quad \frac{1}{2}b}$$

$$\frac{1}{\frac{1}{2}} \cdot \frac{A}{b} = h$$

$$\boxed{2 \cdot \frac{A}{b} = h} \rightarrow \frac{2A}{b} = h$$

Solve for M

$$\frac{D = MV}{V \quad V}$$

$$\boxed{\frac{D}{V} = M}$$

Solve for y:

$3x+2y=6$

$-3x \quad -3x$

$\frac{2y}{2} = \frac{6-3x}{2}$

$y = \frac{6-3x}{2} \rightarrow y = 3 - \frac{3}{2}x$

$Ax+By=C$

$4(y-3)+7=15$

always +

$|x| = -20$

no solution

$$\frac{4}{4}|x+7| = \frac{12}{4}$$

$$|x+7| = 3$$

$x+7=3$ $\quad -7 \quad -7$

$\boxed{x=-4}$

$x+7=-3$ $\quad -7 \quad -7$

$\boxed{x=-10}$

* Get abs. value alone

* If abs. value = +
  ↳ 2 solutions

* If abs. value = −
  ↳ 0 solutions

* If abs. value = 0
  ↳ 1 solution

$$\frac{3}{x} = \frac{2}{10}$$

$$|2x+7| = 0$$

$$2x+7 = 0$$
$$-7 \quad -7$$

$$\frac{2x}{2} = \frac{-7}{2}$$

$$\boxed{x = \frac{-7}{2}}$$

$\frac{(x+3)}{5} = \frac{x}{6}$ Proportion

$5x = 6(x+3)$

$5x = 6x + 18$

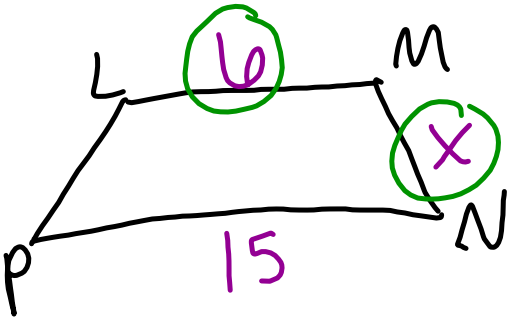
$-5x \quad -5x$

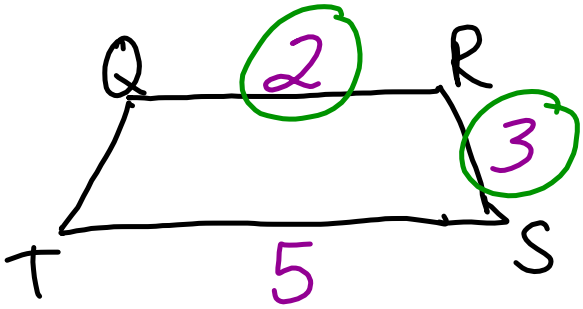
$0 = x + 18$

$-18 \quad -18$

$-18 = x$

$LMNP \sim QRST$ $\frac{6}{x} = \frac{2}{3}$





Precision: level of detail

0.03 0.0374

Accuracy: how close to the actual value

ex: 5lbs

Scale 1	Scale 2
4.99	5.021
0.01	0.021

$$7x+3-4x=3-3(x+4)$$