

Name: \_\_\_\_\_

1. Solve for the unknown ( $x$ ,  $k$ , or  $t$ ). Format your answers such that they are presentable.

(a)  $3x + 3x = 99$

Answer: \_\_\_\_\_

(b)  $1500t + 1000t - 20000 = 0$

Answer: \_\_\_\_\_

(c)  $7k + k = 48$

Answer: \_\_\_\_\_

(d)  $12x - x = 341$

Answer: \_\_\_\_\_

(e)  $20000 - 1500t + 1000t = 0$

Answer: \_\_\_\_\_

(f)  $7x = 8 + x$

Answer: \_\_\_\_\_

2. Three times a number is five less than 17. What is this number?

Answer: \_\_\_\_\_

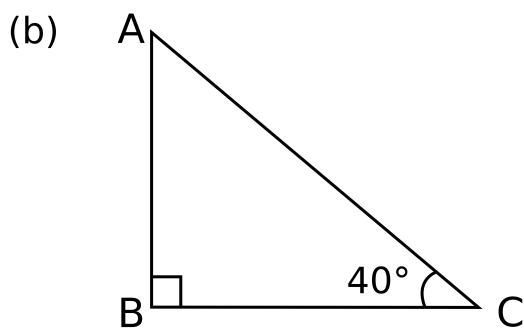
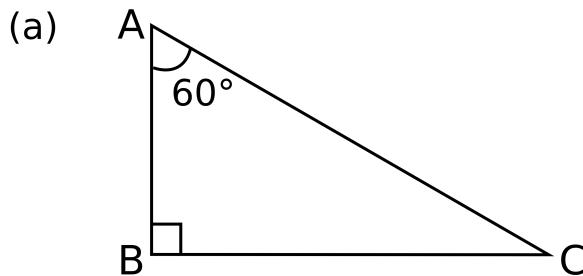
3. Renegade jumps off a battle bus at a height of 4000 meters. He aims straight down and lands after 7.2 seconds. What is his (average) speed?

Answer: \_\_\_\_\_

4. Chase stole Calvin's sandwich and started running away at a speed  $v = 8$  m/s. After 5 seconds, Calvin realized that his sandwich was gone and started chasing after Chase at a speed  $v = 10$  m/s. Chase saw that Calvin is running faster than him, so he stopped running and started to eat the sandwich at  $\frac{1}{4}$  sandwich per second. How much sandwich is left (if any) when Calvin catches Chase?

Answer: \_\_\_\_\_

5. Find the missing angles in the following picture.



Answer: \_\_\_\_\_

6. Find the missing angle in  $\triangle ABC$ . Feel free to draw your own triangles.

(a)  $\angle A = 60^\circ, \angle C = 50^\circ$

Answer: \_\_\_\_\_

(b)  $\angle B = 35^\circ, \angle C = 12^\circ$

Answer: \_\_\_\_\_

(c)  $\angle A = 70^\circ, \angle B = 90^\circ$

Answer: \_\_\_\_\_