

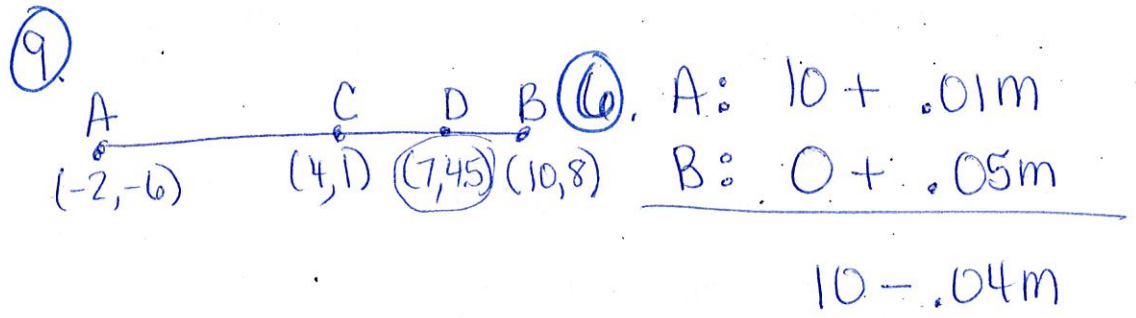
Unit 1 Review

Name: KEY

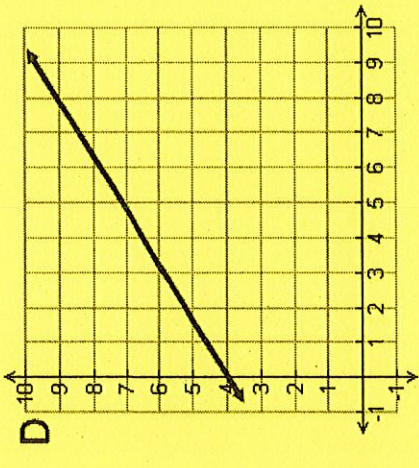
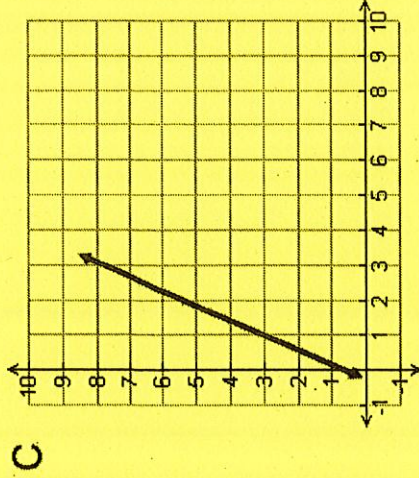
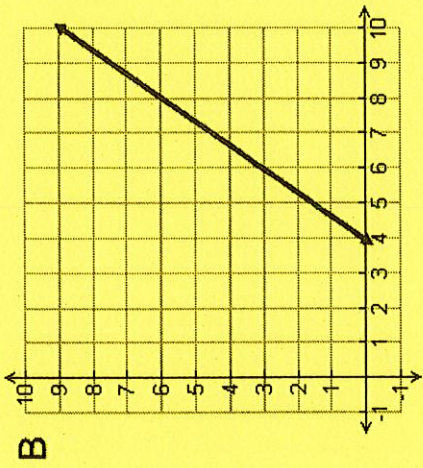
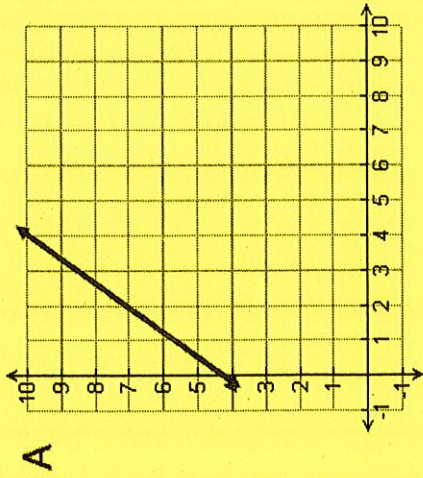
1. (D) $S = \frac{2}{3}T + 4$	2. (D) $y + x \leq 6$ $y \leq -x + 6$ at most
3. $2x + 2 = 50$ $2x = 48$ $x = 24$ 1st 24 2nd 26 3rd 28 (28)	4. (5th)
5. (A) $W = Pt$	6. (D) $C(m) = -.04m + 10$
7. (D) 19.4 $d = \sqrt{(2-4)^2 + (3-1)^2} = \sqrt{5}$ $d = \sqrt{(4+1)^2 + (-1-7)^2} = \sqrt{41}$ $d = \sqrt{(2+1)^2 + (3-5)^2} = \sqrt{5}$	8. (B) 3 weeks $5x + 20 = 11x + 2$ $18 = 6x$ $3 = x$
9. (B) (7, 4.5)	

4. 47.  
6. 4  
8. 5

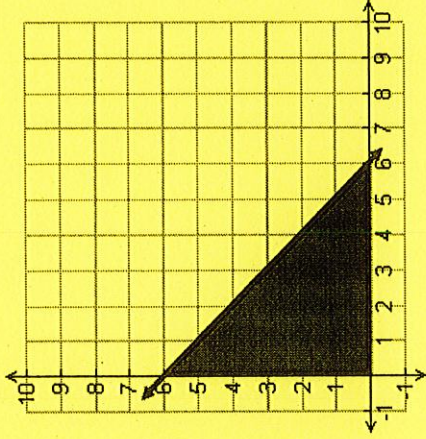
(7)  $d = \sqrt{(2-4)^2 + (3-1)^2}$   
 $\sqrt{(-2)^2 + (4)^2}$   
 $\sqrt{4 + 16} = \sqrt{20}$



1. (No Calculator) Samantha's ride to school is 4 minutes more than  $\frac{2}{3}$  Tom's travel time. Which graph shows the possible times of Samantha's and Tom's rides to school?



2. (No Calculator) Which situation is correctly modeled by the graph below?



- a. The number of pounds of candy corns,  $y$ , minus the number of chocolates,  $x$ , is at least 6 pounds.
- b. The number of pounds of candy corns,  $y$ , minus the number of chocolates,  $x$ , is at most 6 pounds.
- c. The number of pounds of candy corns,  $y$ , plus the number of chocolates,  $x$ , is at least 6 pounds.
- d. The number of pounds of candy corns,  $y$ , plus the number of chocolates,  $x$ , is at most 6 pounds.

3. (No Calculator) What is *largest* of three consecutive even integers if the sum of the smaller two integers is 50?

4. (No Calculator) Bob and Daryl are playing a game.

- Both Bob and Daryl have 4 points to start the game.
- At the *end of each turn*, Bob's points are doubled.
- At the *end of each turn*, Daryl's points are increased by 10.

At the *start of which turn* will Bob have more points than

Daryl?

5. Power and Work are related by the equation

$P = W/t$ ; where  $W$  is the work and  $t$  is the amount of time the work is done on an object.

Which equation gives  $W$  in terms of  $P$  and  $t$ ?

a.  $W = Pt$

c.  $W = t/P$

b.  $W = P/t$

d.  $W = Pwt$

6. Internet Company A charges \$10 a month plus \$0.01 per minute, m. Internet Company B charges \$0.05 per minute, but does not charge a start-up fee like Company A does. Which function represents the difference in cost between Company A and Company B?

a.  $C(m) = 10m - 0.04$       c.  $C(m) = 10.04m$

b.  $C(m) = 10m + 0.04$       d.  $C(m) = -0.04m + 10$

7. A triangle has the vertices  $T(2, 3)$ ,  $R(4, -1)$  and  $I(-1, -5)$ . What is the approximate perimeter of the triangle?

- a. 15
- b. 16.3
- c. 18
- d. 19.4



8. Elise and Abby are both saving money for their trip. The table below shows the models for the amount of money Elise and Abby saved after  $x$  weeks.

<b>Elise</b>	$e(x) = 5x + 20$
<b>Abby</b>	$a(x) = 11x + 2$

After how many weeks will Elise and Abby have the same amount of money?

- a. 2 weeks    b. 3 weeks    c. 4 weeks    d. 5 weeks

9. C is the midpoint of line segment AB. D is the midpoint of line segment CB. A is located at  $(-2, -6)$  and B is at  $(10, 8)$ . What are the coordinates of D?

a.  $(4, 1)$

b.  $(7, 4.5)$

c.  $(1, -2.5)$

d.  $(3, -1)$