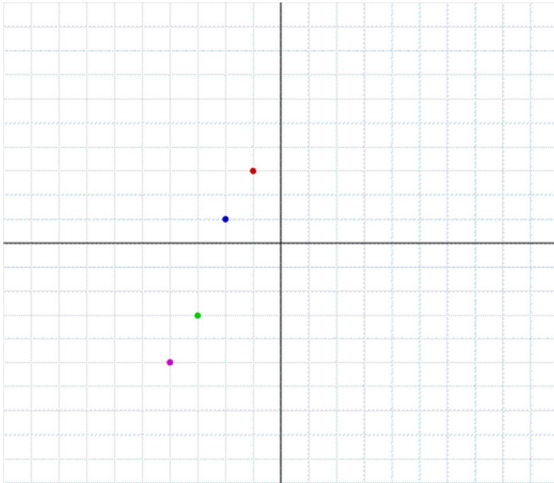


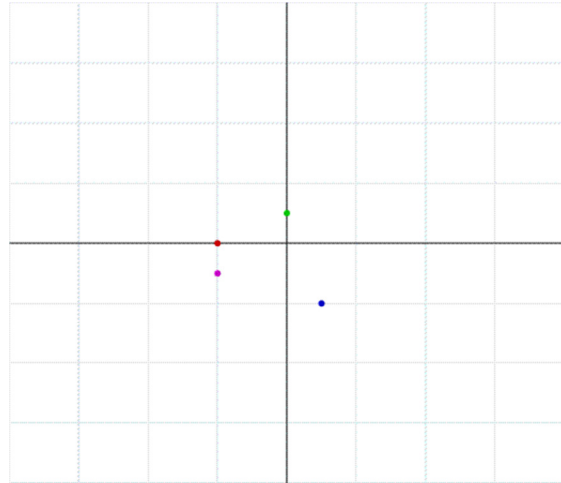
CHAPTER 2 ANSWERS

PROBLEM SET 2-1

1.



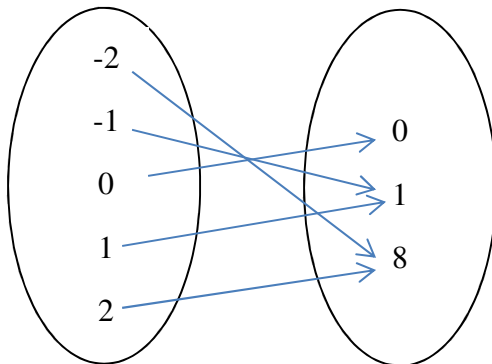
2.



3.

D

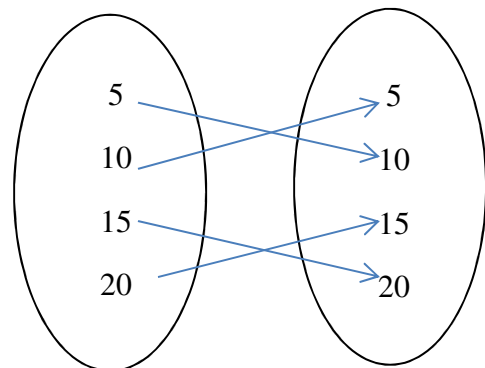
R



4.

D

R



5.

Yes

6.

Yes

7.

13, 7, -3.5, -14

8.

-2, -4, -7.5, -11

9.

-13, -9, -2, 5

10.

$-\frac{23}{6}, -\frac{13}{6}, \frac{3}{4}, \frac{11}{3}$

11.

Domain = $\{-4, -3, -2, -1\}$

12.

Domain = $\{-\frac{3}{2}, \frac{1}{2}, \frac{3}{2}, \frac{5}{2}\}$

Range = $\{1, 2, 3, 4\}$

Range = $\{-\frac{1}{2}, \frac{1}{2}\}$

Function

Function

13. Domain = $\{-2, -1, 0, 9\}$

Range = $\{2, 5, 7\}$

Not a function

14. Domain = $\{-3 \leq x \leq 3\}$

Range = $\{-2 \leq y \leq 2\}$

Not a function

15. Yes

16. No

17. -3

18. $-\frac{2}{3}$

19. $-4x - 14$

20. 7

21. $\frac{3}{4}$

PROBLEM SET 2-2

1. -1

2. 3

3. $-\frac{1}{5}$

4. Undefined

5. $\frac{17}{5}$

6. $-\frac{5}{13}$

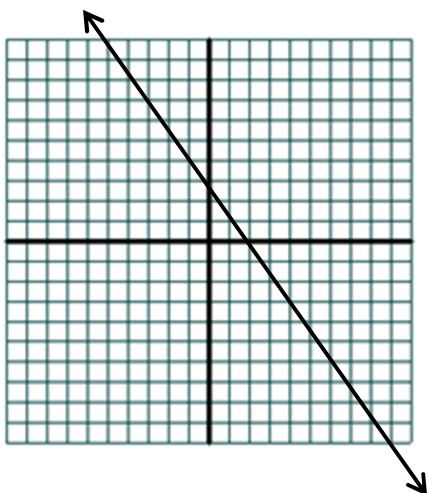
7. $-\frac{7}{10}$

8. $\frac{3}{2}$

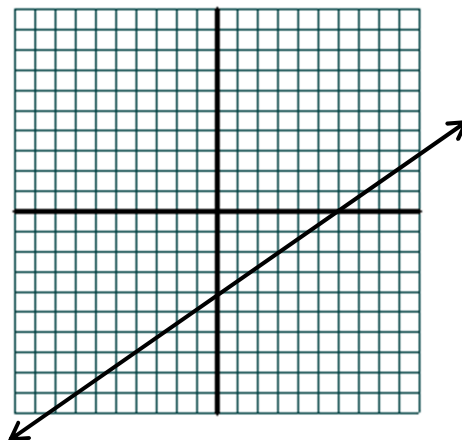
9. $-\frac{A}{B}$

10. 0

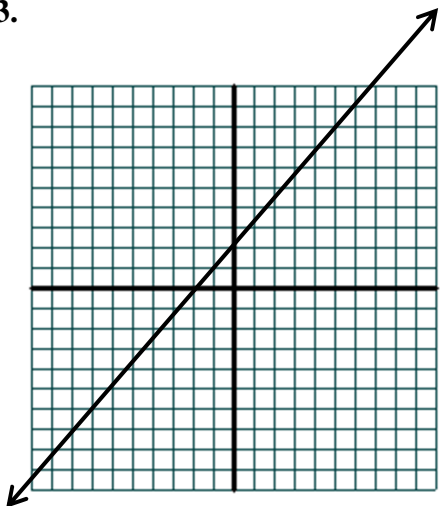
11.



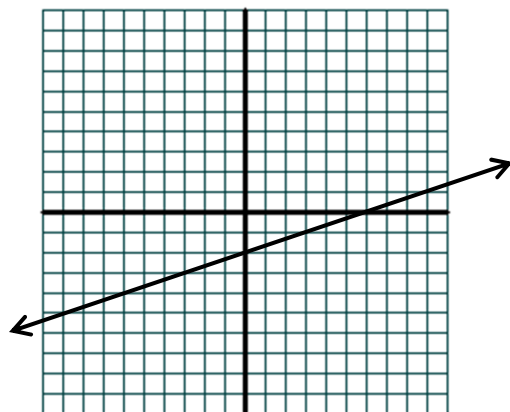
12.



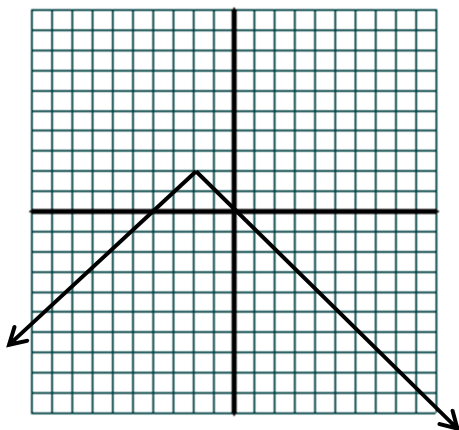
13.



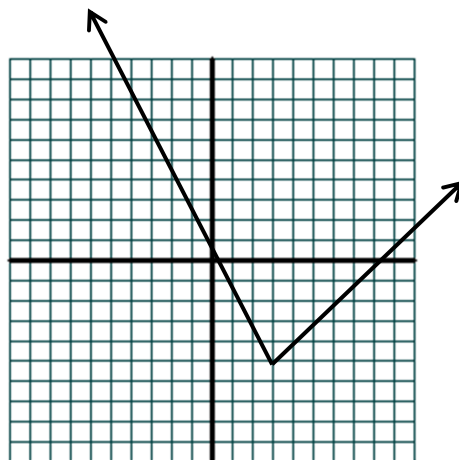
14.



15.



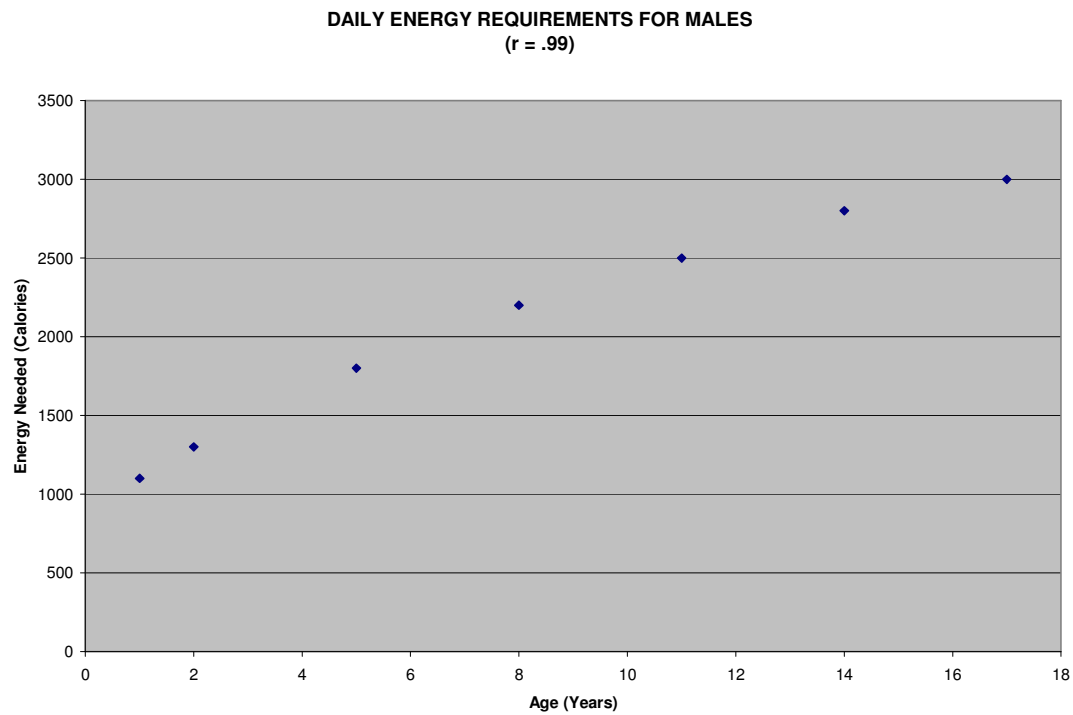
16.



	Point-Slope Form	y-Intercept Form	Standard Form
17.	$y - 12 = \frac{5}{6}(x - 22)$	$y = \frac{5}{6}x - \frac{19}{3}$	$5x - 6y = 38$
18.			$y = -2$
19.	$y + 2 = 5(x - 0)$	$y = 5x + 2$	$5x - y = -2$
20.	$y - 0 = \frac{5}{4}(x - 1)$ $y - 5 = \frac{5}{4}(x - 5)$	$y = \frac{5}{4}x - \frac{5}{4}$	$5x - 4y = 5$
21.	$y + 1 = -\frac{4}{3}(x - 0)$ $y + 5 = -\frac{4}{3}(x + 5)$	$y = -\frac{4}{3}x + 1$	$4x + 3y = -3$
22.	$y - 9 = -\frac{7}{5}(x - 1)$ $y - 2 = -\frac{7}{5}(x - 6)$	$y = -\frac{7}{5}x + \frac{22}{5}$	$7x + 5y = 22$
23.	$y + 1 = \frac{5}{2}(x + 3)$	$y = \frac{5}{2}x + \frac{13}{2}$	$7x - 2y = -13$
24.			$x = 1$

PROBLEM SET 2-4

1a)

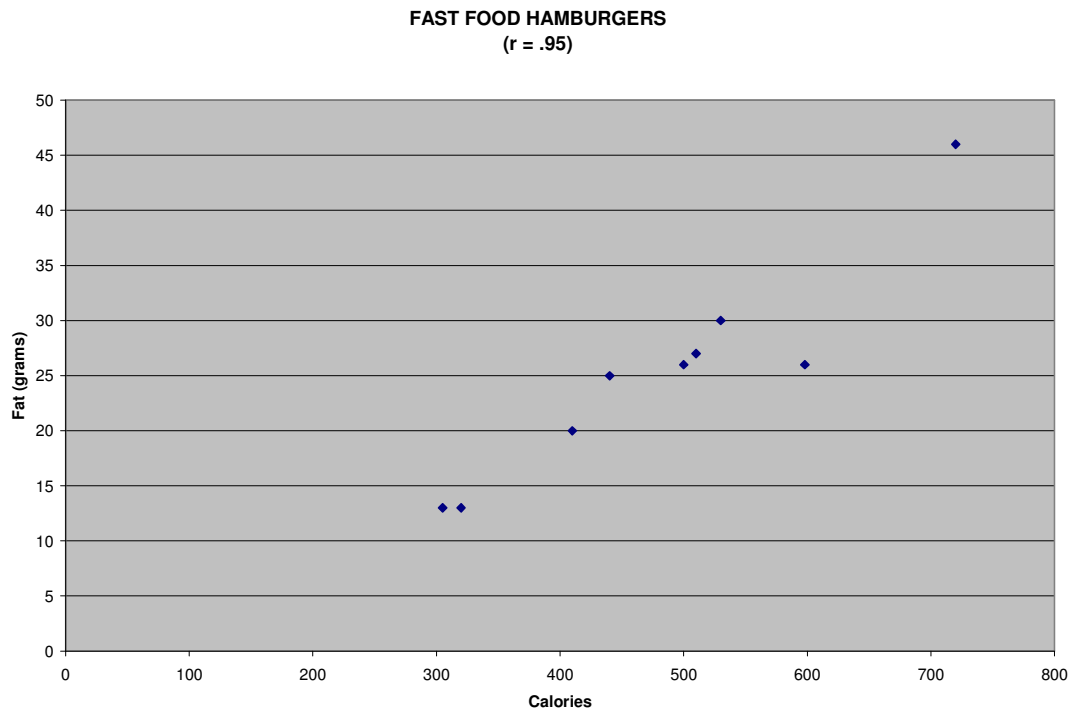


b) $\text{Energy Needed} = 119.40(\text{Age}) + 1110.68$

c) 3021.09 calories

d) No- adults need fewer calories (not more)

2a)



b) Fat Grams = $.0714(\text{Calories}) - 9.2682$

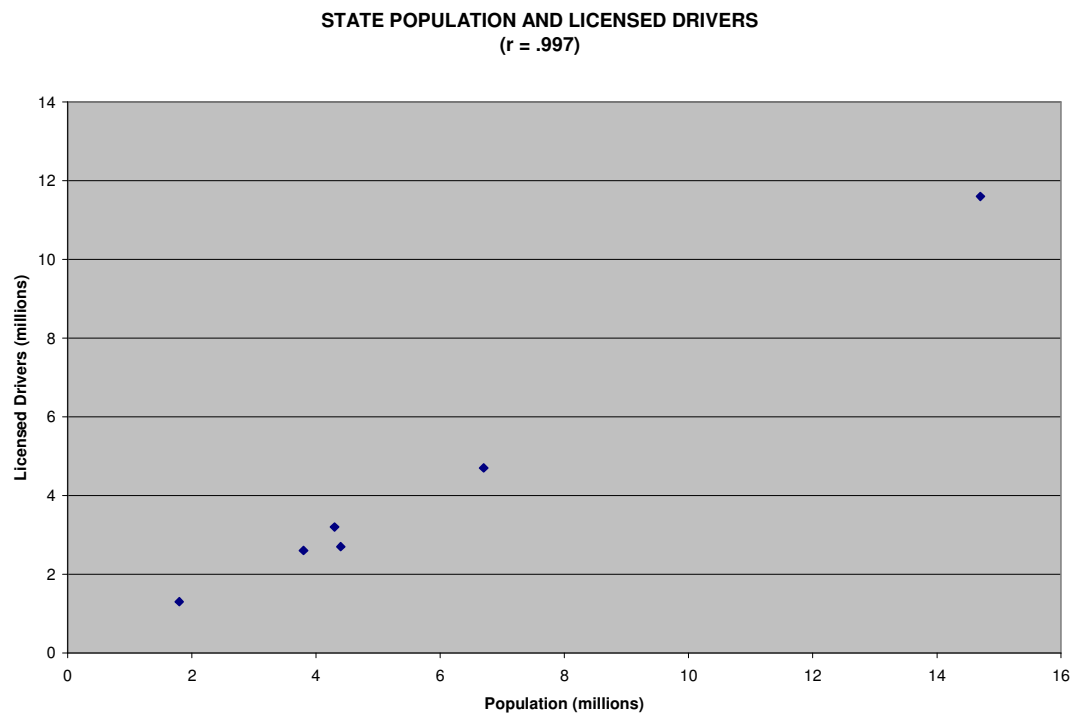
c) 14.30 grams

d) 200 calorie burger ---> 5.01 fat grams ---> 10 fat grams **not** reasonable

660 calorie burger ---> 37.86 fat grams ---> 36 fat grams reasonable

3a) Population (use to predict licensed drivers)

b)

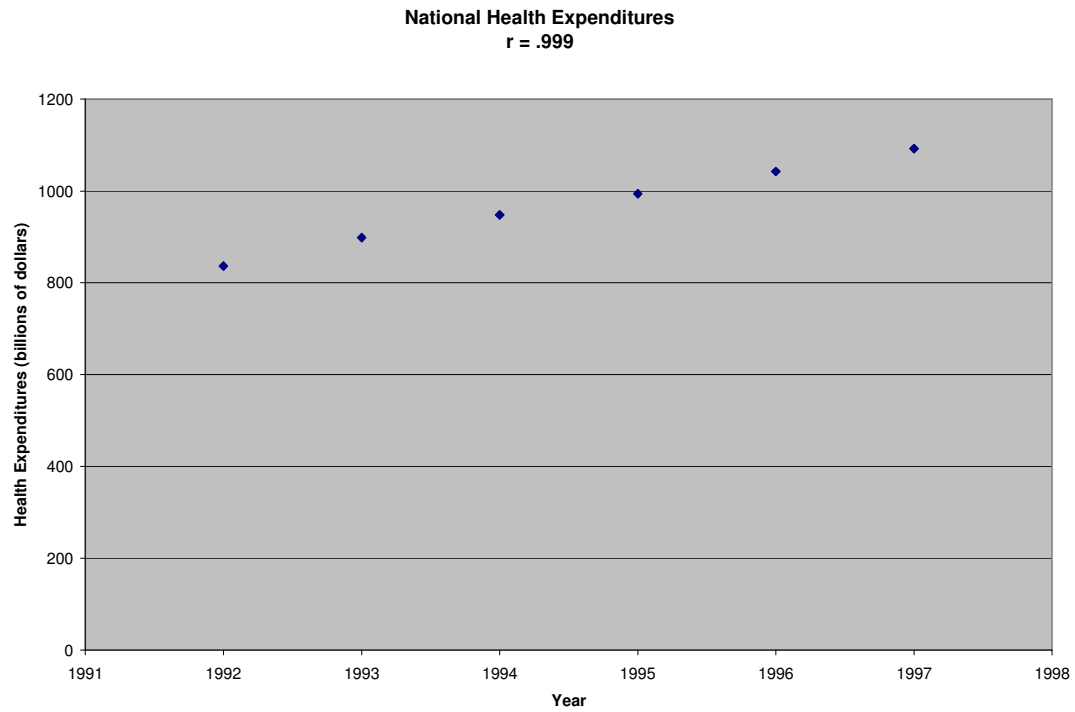


c) Licensed Drivers = $.8125(\text{Population}) - .4842$

d) 1.95 million

e) Strong correlation (99.7)... all points fall close to a straight line

4a)



b) $\text{Health Expenditures} = 50.21(\text{Year}) - 99183.84$

↑
1992, 1993...

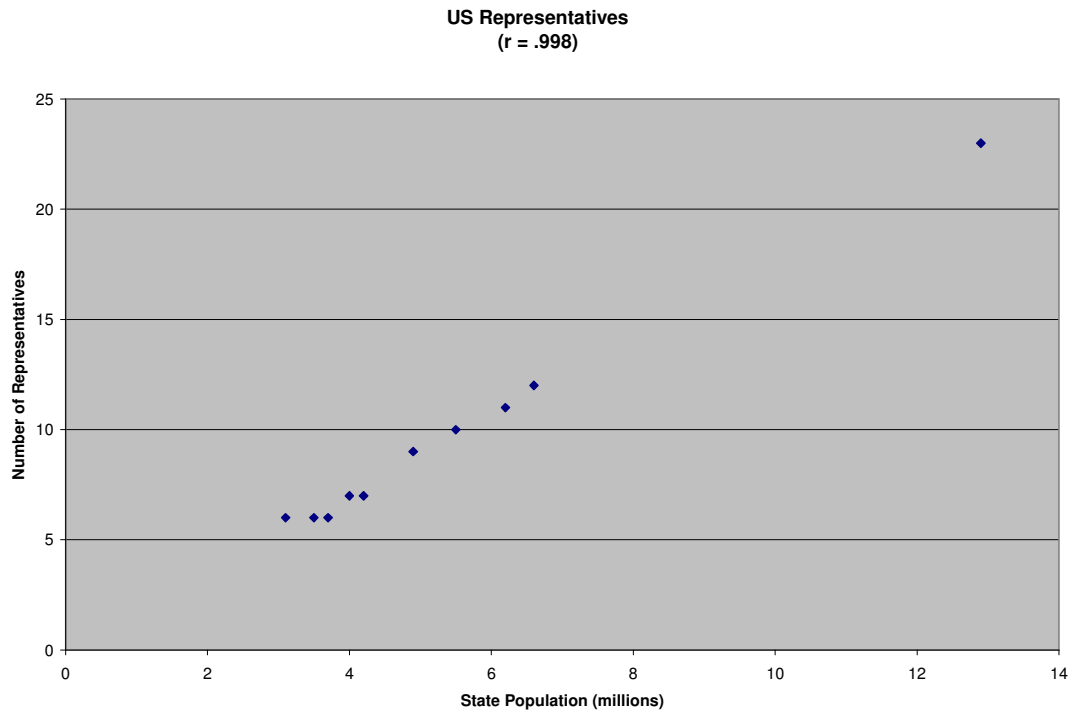
$$\text{Health Expenditures} = 50.21(\text{Year}) - 3776.7$$

↑
92, 93...

$$\text{Health Expenditures} = 50.21(\text{Year}) + 742.59$$

↑
2, 3...

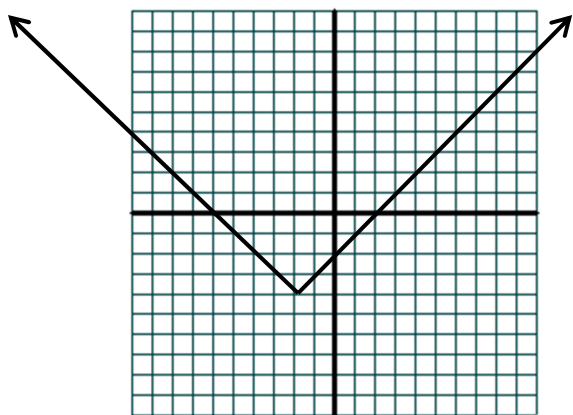
5a)



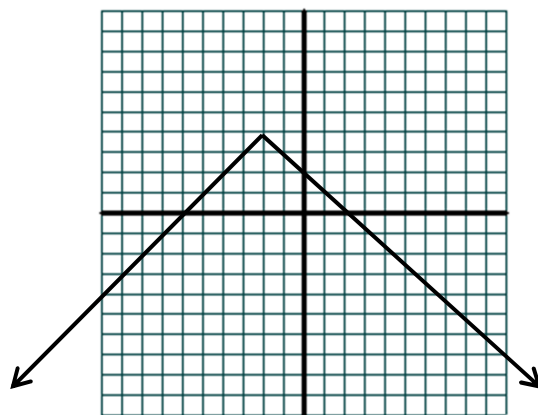
b) $\text{Number of Representatives} = 1.80(\text{Population}) - .13$

PROBLEM SET 2-5 AND 2-6

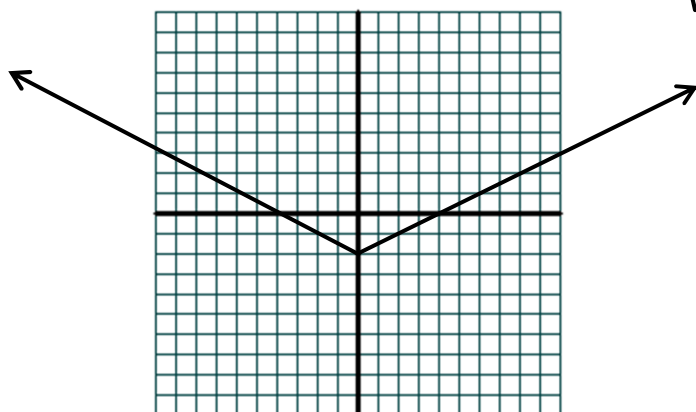
1.



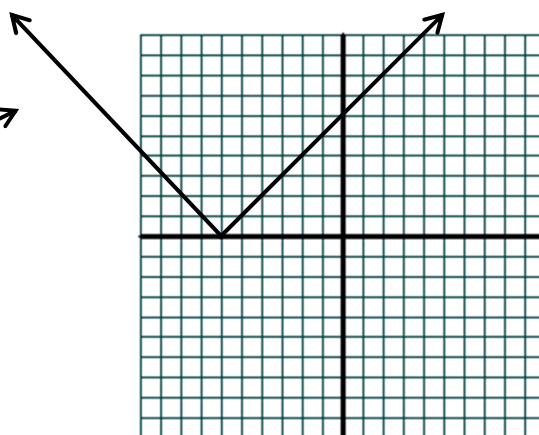
2.



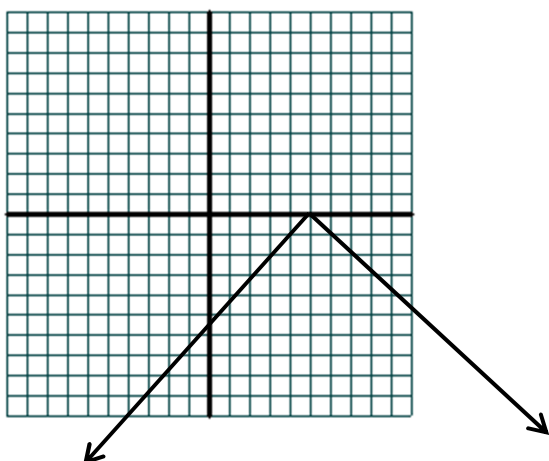
3.



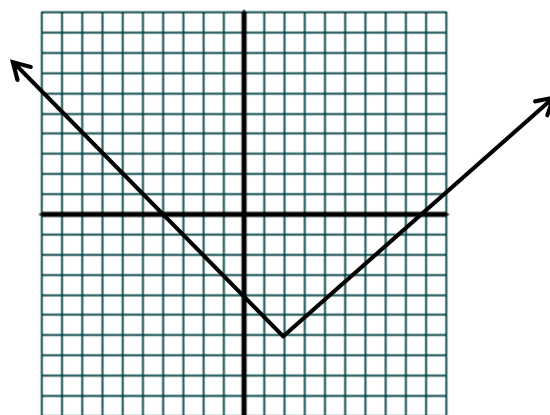
4.



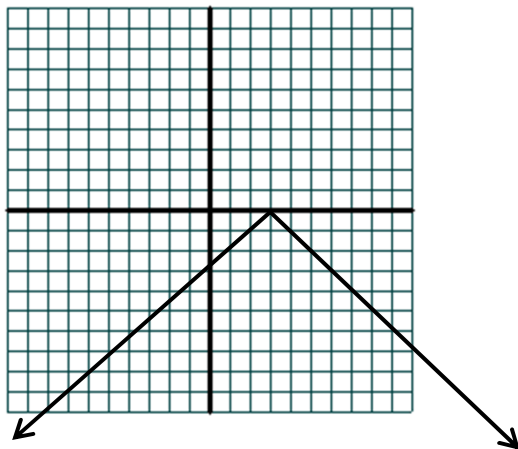
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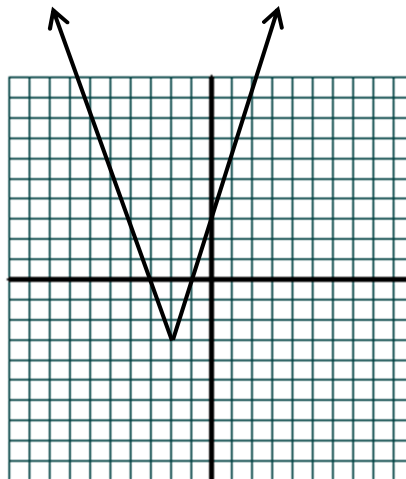
6.



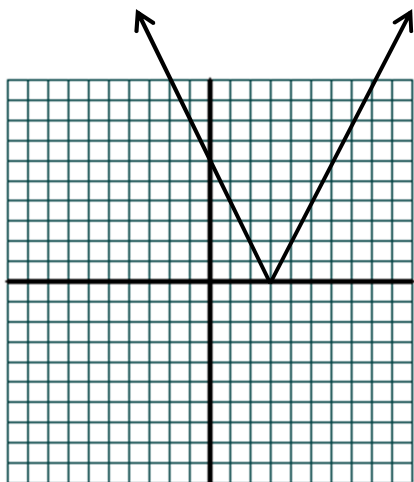
7.



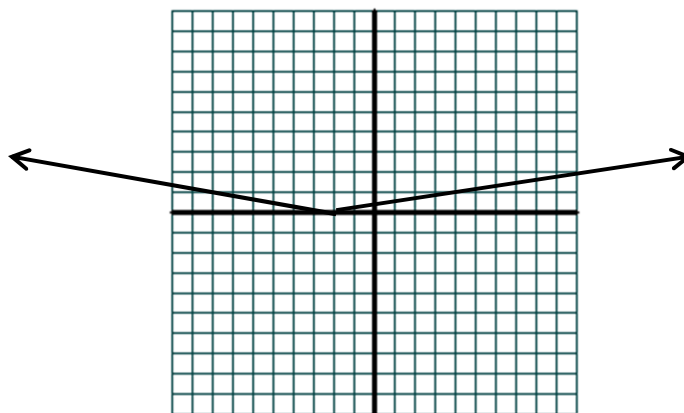
8.



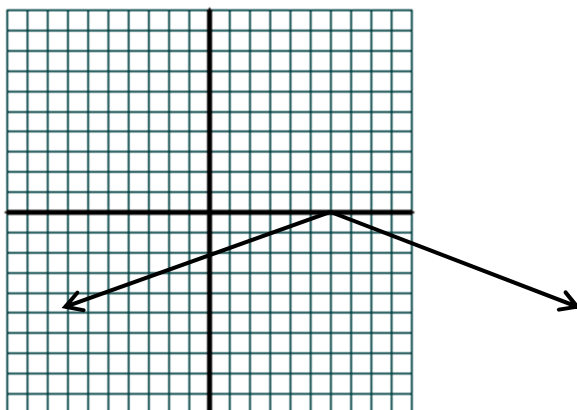
9.



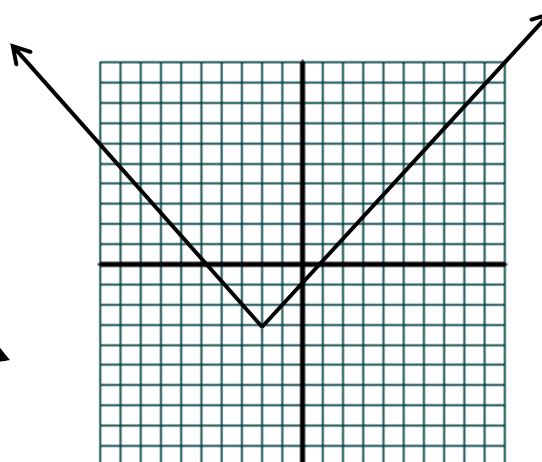
10.



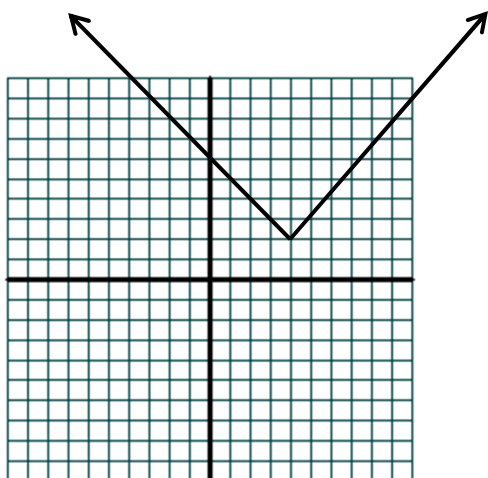
11.



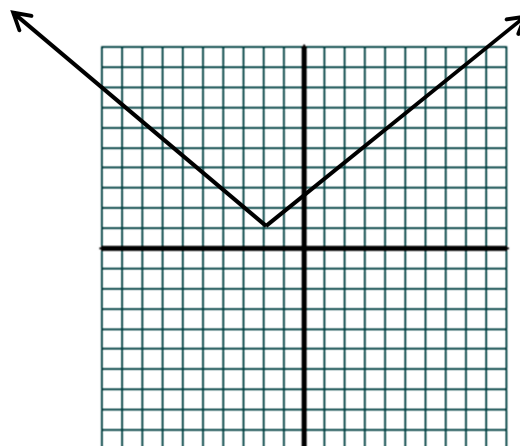
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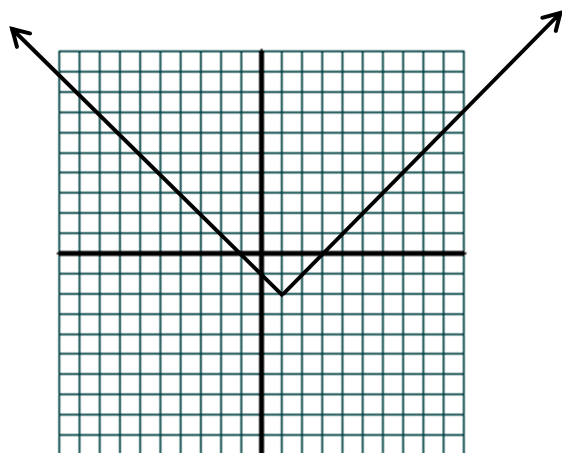
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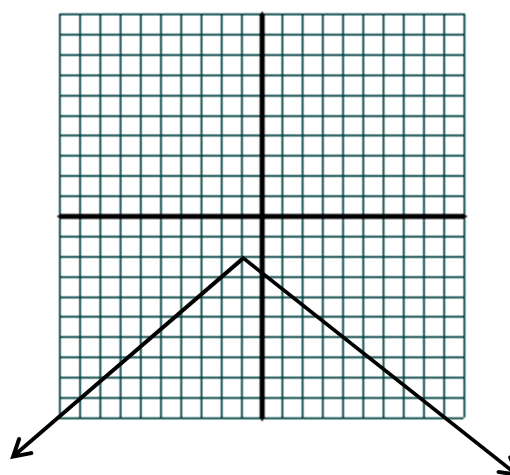
14.



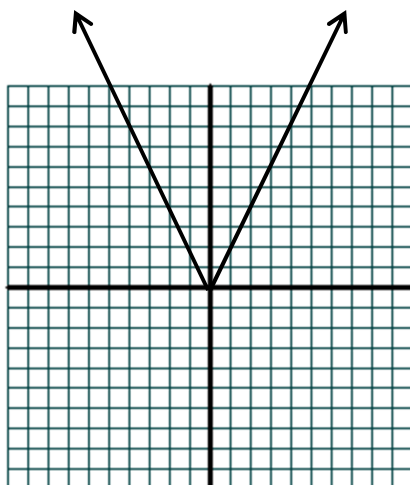
15.



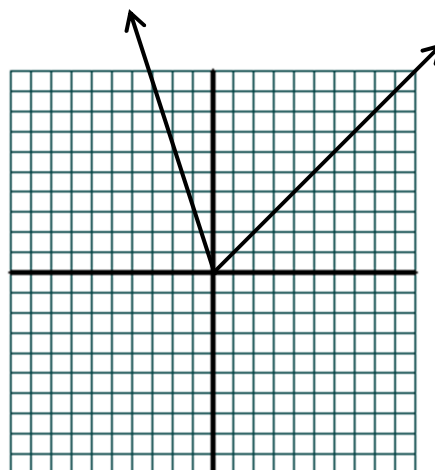
16.



17.

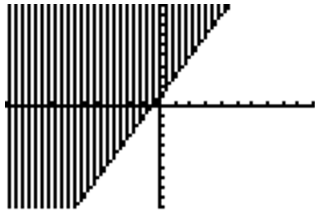


18.

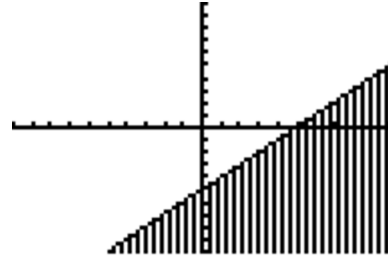


PROBLEM SET 2-7

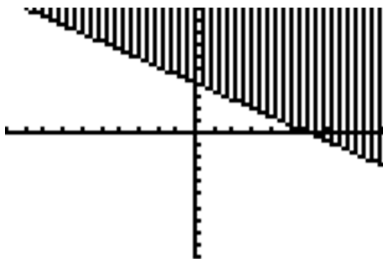
1. Dotted



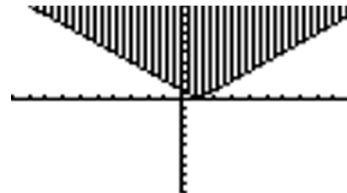
2. Solid



3. Solid



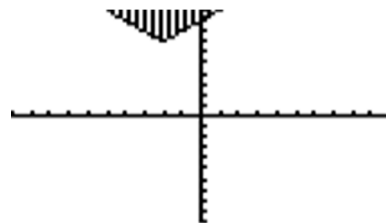
4. Solid



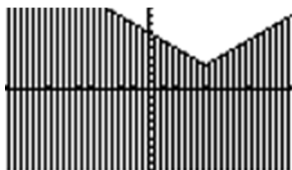
5. Solid



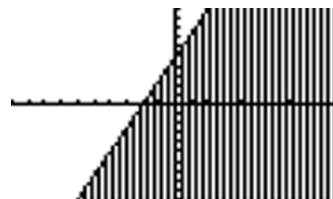
6. Dotted



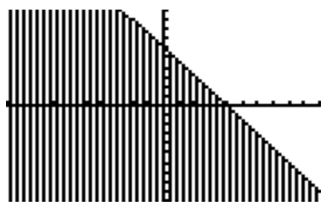
7. Solid



8. Solid



9. Solid



10. Dotted

