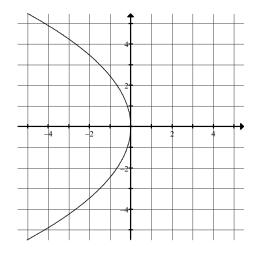
## **Homework 8 (8.1)**

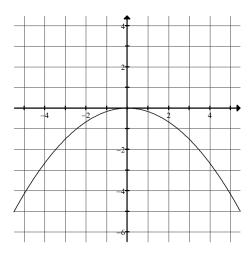
Problem 8.1.12 refers to problem 12 in Chapter 8, Section 1 of the online text. Record your answers to all the problems in the EMCF titled "Homework 8."

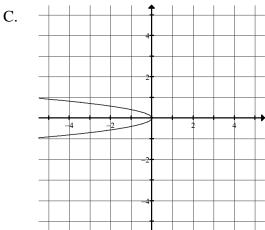
Problem 8.1.12 Which could be the graph of the parabola? 1.

A.

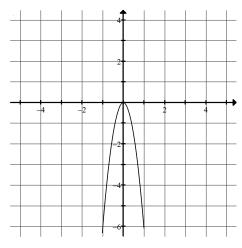


B.





D.



- E. None of the above
- 2. Problem 8.1.20 e f
  - A. (1, 6); 8
  - C. (0, -3); 4

- B. (1, 4); 8
- (1, 4); 4D.

E. None of the above

#### 3. Problem 8.1.22a

A. 
$$(x-4)^2 = 2(y+3)$$

C. 
$$(x+4)^2 = 2(y-3)$$

E. 
$$(x-1)^2 = 8(y-\frac{11}{8})$$

B. 
$$(x-4)^2 = 2(y-13)$$

D. 
$$(x-4)^2 = 2(y+3)^2$$

### 4. Problem 8.1.22 b c

A. 
$$x = 3$$
; (3, 4)

C. 
$$x = -4$$
;  $(-4, 3)$ 

E. 
$$x = 1$$
:  $(1, 1.375)$ 

B. 
$$x = -3$$
;  $(-3, 4)$ 

D. 
$$x = 4$$
;  $(4, -3)$ 

#### 5. Problem 8.1.22 d, e

A. 
$$y = -2.5$$
;  $(4, -3.5)$ 

C. 
$$x = 3.5$$
;  $(4.5, -3)$ 

E. 
$$y = -1.5$$
;  $(4, -1)$ 

B. 
$$y = -3.5$$
;  $(4, -2.5)$ 

D. 
$$x = 4.5$$
;  $(3.5, -3)$ 

#### 6. Problem 8.1.22f

# 7. Problem 8.1.22g

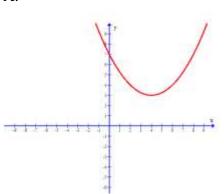
A. 
$$(3.5, -2.5), (4.5, -2.5)$$

C. 
$$(3, -2.5), (5, -2.5)$$

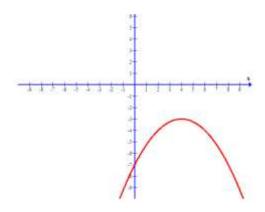
E. 
$$(3, -2), (5, -2)$$

B. 
$$(2, -2.5), (6, -2.5)$$

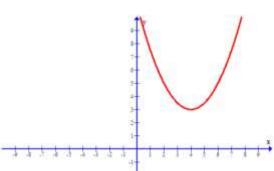
D. 
$$(3, -3), (5, -3)$$



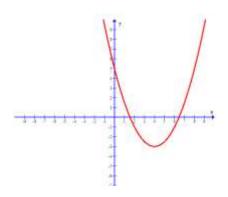
B.



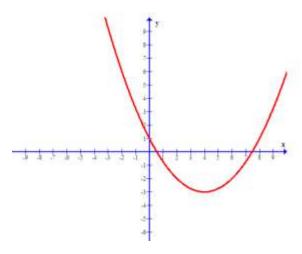
C.



D.



E.



- 9. Problem 8.1.28 c d
  - A. (2, -1);
- x = 2
- C. (2,-1);
- y = 2

- E.
- (5, 1);
- x = 5

- B.
- (4, 0);
- y = 3

- D. (4, 2);
- y = -4

A. 
$$x^2 = 8(y-1)$$

B. 
$$(x-1)^2 = 2(y+3)$$

C. 
$$(x-4)^2 = -8(y-3)$$

D. 
$$(x-4)^2 = 2(y-3)$$

- 11. The vertex of a parabola is a point on the parabola that also is on its axis of symmetry.
  - A. True
  - B. False

For numbers 12 - 15, match each equation to its graph.

12. 
$$y^2 = 4x$$

13. 
$$y^2 = -4x$$

$$14. x^2 = 4y$$

15. 
$$x^2 = -4y$$

