\_\_\_ \_\_\_ \_\_\_ \_\_\_ \_\_\_ \_\_\_ \_\_\_ \_\_\_ \_\_\_ \_\_\_ \_\_\_ \_\_\_ \_\_\_ \_\_\_ \_\_\_ \_\_\_ \_\_\_

1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17

Simplify each expression.

P -

S -

N -

R -

T -

M -

O -

D -

Find the product.

U -

O -

A -

E -

T -

D -

F -

H -

Simplify

M -

N -

Y -

R -

F -

B -

I -

O -

Solve.

O -

C –

W -

D -

Solve.

K -

S -

B -

R -

Solve.

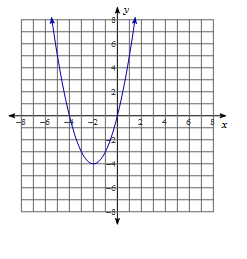
L -

Y -

V -

S -

10. What is the vertex of the function graphed below?



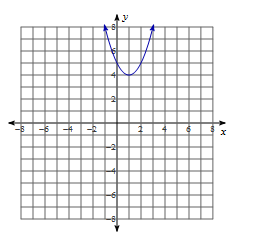
O - (-2, -4); minimum

I - (-2, -4); maximum

A - (2, 4); minimum

E - (2, 4); maximum

11. What is the vertex of the function graphed below?



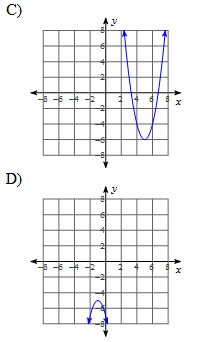
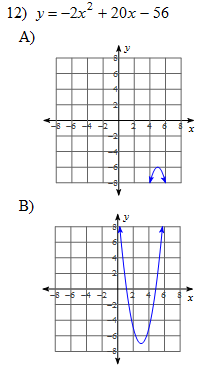
E - (-1, -4); minimum

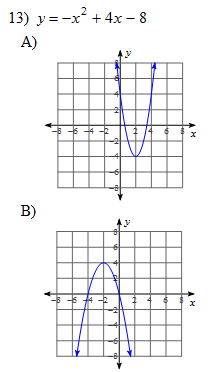
U - (1, 4); minimum

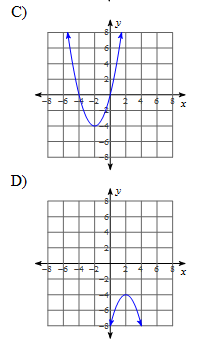
O - (1, -4); maximum

A - (-1, 4); maximum

Which graph represents the new function?







Find the discriminant of each quadratic equation then state the number and type of solutions.

14. 15.

E - 0; one real solution A - 0; two imaginary solutions

R - 0; two real solutions B - -111; two imaginary solutions

K - 65; two real solutions S - 0; one real solution

D - 32; two real solutions N - 72; two real solutions

Factor over the complex number system.

16. x2 + 25 17. x2+16

T – (x+5i)(x-5i) ? – (x-4i)2

W – (x-5i)2 ! – (x+4i)(x-4i)

R – (x+5)2 . – (x+4i)2

L – (x-5)(x+5) : - (x-4)(x+4)