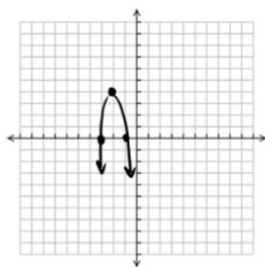


Final REVIEW p11-14

Answers to EXTRA Practice

1.



a.
2.

x	y	1st differences	2nd differences
-4	-2		
-3	1	+3	-2
-2	2	+1	-2
-1	1	-1	-2
0	-2	-3	-2
1	-7	-5	-2



b. graph is quadratic since 2nd differences are the same
c. vertex= $(-2, 2)$, axis of symm= $x=-2$, optimal value= $y=2$, Max

3

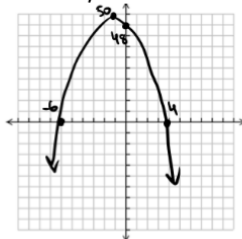
a. $6t^2 + 1rt - r^2$ b. $25q^2 - 80qr + 64r^2$

4.

a. $3x(1x-2)$ b. $(d-7)(d-5)$ c. $(11x+3y)(11x-3y)$

5.

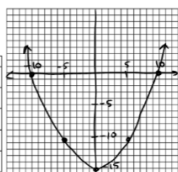
a. y-int= $(0, 48)$ b. zeros $(4, 0)(-6, 0)$ c. axis of symm= $x=-1$



d. opt val= $y=50$ e. vertex= $(-1, 50)$ f.

6.

t	$d = 0.15t^2 - 15$
-10	$0.15(-10)^2 - 15 = 0$
-5	$0.15(-5)^2 - 15 = -11.25$
0	$0.15(0)^2 - 15 = -15$
5	$0.15(5)^2 - 15 = -11.25$
10	$0.15(10)^2 - 15 = 0$



a. b. depth=15meters c. reach surface in 10sec

7.

a. original revenue=\$6000 b. max revenue=\$9000 c. n=10times
d. price=\$6+\$0.60(10)=\$12 e. Rev=\$8250

8.

a. 13.1m b. 53°
c. 56° d. 3.1m

9.

a. 87.8m b. 111.4m

10.

a. $\triangle ABC \approx \triangle MKL$ b. x=1.7m
 $\frac{AB}{MK} = \frac{BC}{KL} = \frac{AC}{ML}$

11. SA=1884inches² V=6280 in³ 12. V=486cm³

13.

a. 16.25miles b. $5\text{quarts} \times \frac{2\text{pints}}{1\text{quart}} \times \frac{1\text{gal}}{8\text{pints}} \times \frac{3.785\text{L}}{1\text{gal}} = 4.7\text{L}$ c. $58\text{inchs} \times \frac{1\text{foot}}{12\text{inches}} \times \frac{1\text{yard}}{3\text{feet}} = 1.6\text{yard}$