1. Find the equation of the line passing through the points and .
2. Find the point of intersection of the lines and using substitution and elimination.
3. Expand and simplify the expression
4. Factor the expressions
5. Complete the square and state the vertex:
6. Solve for x.

Complete the “Review of Essential Skills” handout (first two pages).

**Review of Essential Skills – Getting Started for Unit 1**

1. Operations with Integers Ex. Evaluate

a) 3 + (–6)( –4) b) (–5)2 c) –34

1. Operations with Rational Numbers Ex. Evaluate 
2. Evaluating Algebraic Expressions. Find the value of 5*x*2 *y* + 6*xy* – 4*y*2 – 1 if *x* = – 3 & *y* = 2
3. Expanding and Simplifying Algebraic Expressions Ex. Expand and simplify

a) 5*x*2 *y*(2*xy* – 3*y*2) b) (3*x* + 2*y*)2 c) 

1. Factoring Ex. Factor fully

a)  b)  c) 

1. Solving Equations Ex. Solve

a)  b) 

1.a) 27 b) 25 c) –81 2.  3. 37

4.a) 10*x*3*y2 –* 15*x*2*y3* b) 9*x2 +* 12*xy* + 4*y*2 c) 

5. a) (*x* + 5*y*)(*x* – 5*y*) b) (*x* + 1)(*x* – 6) c) 2(3*x* + 1)(*x* + 2)

6. a) 2 b) 1, 3 c) 

\

c) 

**Essential Grade 10 Skills Needed for Later Units**

1. Graphing Ex. Name the type of relation, name the original (untransformed) function, list the transformations, then graph.

a)  b) 

Linear04Linear04

1. Solving Linear Systems

Ex. Solve





1. Quadratics – Completing the Square

Ex. Find the vertex of 

1. Trigonometry

Ex. Determine the value of θ rounded to nearest degree and/or *x*, rounded to nearest tenth

a) b) c)

6.0 m

36°

*x*

5.0 m

*x*

θ

85°

8.0 m

51°

9.0 m

*x*

10.5 cm

14.6 cm

θ

d)

71.0 cm

θ

45.0 cm

66.0 cm

Solutions

7. a) linear, *y = x* ,

reflect about *x* axis,

vertical stretch by a factor of 4,

translate up 5 units

b) quadratic, *y = x2* ,

vertical stretch by a factor of 2,

translate right 3 units and down 4 units

8.(–3, –11) 9. (3, 43)

10. a) θ = 44°, *x* = 10.1 cm b) θ = 44°, *x* = 11.5 m c) *x* = 3.5 m d) θ = 77°