## 2016S MA441-B124 PREVIEW-SHEETS Your name:

Question 1 (Arithmetic skill-signed number) Calculate.

- 8+(-6) =
  (-8) · (-2) =
  4 (-8) =
  12 ÷ (-2) =
  (-2)(-1) = (−5) − 2 = • 4 - 9 =
- (-9) (-2) =
  6 (-3) = • (-7) + (-3) =

Question 2 (Arithmetic skill-fraction) Simplify.

•  $\left(\frac{2}{3}\right) \cdot \left(\frac{1}{6}\right) =$ •  $\left(-\frac{4}{5}\right) \div \left(-\frac{2}{3}\right) =$ •  $\frac{2}{3} + \frac{1}{6} =$ •  $\frac{1}{4} - \frac{1}{6} =$ 

Question 3 (Agebra skill-+, -,  $\times$ ,  $\div$ ) Simplify.

• (x+1)(x-2) =•  $\frac{4x^2+2x}{2x} =$ • *x* + *x* = •  $(2x^2 - 4x + 1) - (x^2 - 2x + 1) =$ 

Question 4 (Agebra skill-factoring) Factor completely.

• 
$$4x^2 - 9 =$$
  
•  $x^3 - 2x^2 - 2x + 4$   
•  $x^2 - 2x - 8 =$   
•  $2x^2 + x - 6$ 

## Question 5 (Equation) Solve it.

• 2x + 3 = 4

•  $x^2 - 10x = 24$ 

• Solve it for y. x + 2y = 2.

•  $x^3 - 4x^2 - 7x + 10 = 0$ . Use the synthetic division.