Beginning Algebra	Name:
Study Guide 16	Class:
Due Date:	Score:

No Work \Leftrightarrow No Points

Use Pencil Only \Leftrightarrow Be Neat & Organized

1. Solve by using the zero product property:

(a) (2 points) (x+7)(2x-5) = 0

(b) (2 points)	(3x+2)(5x-1) = 0
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(c)	(2 points) $3x(4x)$	(x+5)(2x)	(-5) = 0
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(d) (2 points) (3x-2)(3x+2)(5x-1) = 0

(d) _____

(a) _____

(b) _____

(c) _____

2. Solve by factoring:

(a) (3 points) $x^2 - 4x - 21 = 0$

(b)	(3 points)	$7x^2 + 5x = 0$	(a)
(c)	(3 points)	x(x+4) = 32	(b)
(d)	(3 points)	$3x^2 - 4 = x$	(c)
(e)	(3 points)	$2x^3 = 50x$	(d)

(e) _____

(f) (3 points) (3x-2)(x+4) = 24

(g) (3 points) $(x+4)^2 = 16$

(f) _____

(g) _____

3. (3 points) The product of two consecutive integers is 30. Find all such integers.

3. _____

4. (3 points) Two legs of a right triangle are 4cm, and 3cm. Find the length of the hypotenuse of this triangle.

4. _____

5. (3 points) The area of a rectangular garden is 21 square feet. The length of this garden is 1 foot longer than twice its width. Find its dimensions.

5. _____

6. (4 points) Three sides of a right triangle are three consecutive even integers. Find all three sides of this triangle.

6. _____

7. (4 points) The graph of the equation $y = x^2 + 8x + 12$ has two x intercepts. Find both intercepts.

7. _____

8. (4 points) The graph of the equation $y = x^2 - 9$ has two x intercepts. Find both intercepts.

8._____