

Name \_\_\_\_\_

# 9-2A Lesson Master

Questions on SPUR Objectives

See pages 576–579 for objectives.

## SKILLS Objective A

In 1-4, solve the equation. Give the exact answer(s).

1.  $5x^2 = 100$

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2.  $96 = 12m^2$

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3.  $42 + 4t^2 = 67$

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4.  $-2(3x + 7)^2 = -1,058$

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5. A student made a table of values for  $f(x) = -2x^2$ .

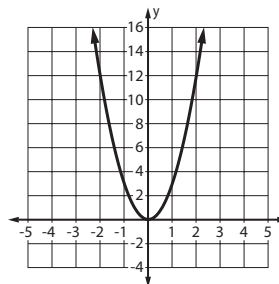
x	-6	-5	-4	-3	-2	-1	0	1	2	3	4	5	6
f(x)	-72	-50	-32	-18	-8	-2	0	-2	-8	-18	-32	-50	-72

What are the solutions to  $-18 = -2x^2$ ?

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6. A graph of  $y = 3x^2$  is shown at the right. Put stars on the graph where  $12 = 3x^2$ . What are the solutions to  $12 = 3x^2$ ?

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## USES Objectives D and E

7. Cole drops a penny into a wishing well. If the water is 42 feet from the top of the well, about how long would it take until the penny hits the water?

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8. Lupe stands at the top of a cliff and drops a stone into the stream below. She carefully times how long it takes until she hears the stone splash into the water. If she hears the splash in 4 seconds, how high above the stream is the top of the cliff?

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9. Dottie has a 14-foot ladder that she needs to use to reach the top of her 10-foot tall garage. How far from the base of the garage should she place the ladder?

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10. If a rectangle has a length that is triple its width and an area of 108 square inches, what are the dimensions of the rectangle?

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