

Quiz 6

Math 80

Version A ANSWERS

Name _____

You have 20 minutes to complete this quiz. No calculators allowed. Please show your work carefully! Good luck!

Factor each polynomial as much as possible.

1. $36x^2 - 49$

$$(6x-7)(6x+7)$$

2. $4t^2 + 12t - 16$

$$4(t+4)(t-1)$$

Solve each quadratic equation by factoring.

3. $6y^2 + 12y = 0$

$$x = 0 \text{ or } x = -2$$

4. $4t(t-4) = -7$

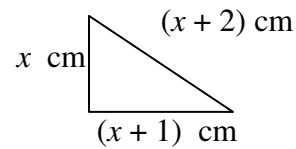
$$t = \frac{1}{2} \text{ or } t = \frac{7}{2}$$

Solve by writing and solving a quadratic equation. Be sure to define a variable if it is not already given, and answer in a complete sentence.

5. The area of a rectangular walkway is 27 square feet. The walkway is three times as long as it is wide. Find the dimensions of the walkway.

The walkway has a length of 9 feet and a width of 3 feet.

6. Find the lengths of the sides of the right triangle shown using the Pythagorean Theorem.



The sides measure 3 cm, 4 cm, and 5 cm.