Name:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Block:\_\_\_

Test: Unit8 (1/2)

Practice

Quadratic formula.

There are 7 questions in this quiz, each of equal value.

Standard time for the quiz is 30 minutes (or to the end of the block).

Four operations calculator is allowed.

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| 1. Solve by factoring (zero product property) | 1'. Solve by factoring (zero product property) |
| 2. Solve by using the quadratic formula | 2'. Solve by using the quadratic formula |

|  |  |
| --- | --- |
| 3. Write a quadratic equation for which the solutions satisfy:  (a) Sum of solutions is -3  (b) Product of solution is | 3'. Write a quadratic equation for which there is only one solution, equal to .  3''. Write a quadratic equation with two solutions, 3 and 7. |
| 4. Determine the type and number of solutions: | 4'. Determine the type and number of solutions: |

|  |  |
| --- | --- |
| 5. The hypotenuse of a right triangle is 25km long. The length of one leg is 17km less than the other. Find the lengths of the legs. | 5'. Given 3 consecutive integers, the product of the first-two is 7 more than the third integer. Find the 3 integers. |

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| 6. Write the equation of the line with slope that goes through the point | 6'. Solve: |
| 7.  a. Given the line , find the perpendicular line that goes through the origin .  b. Find the intersection point of these two lines. | |

8. Given the parabola

and the line:

Find the point(s) of intersection between the parabola and the line.

8'. Given the parabola

and the line:

Find the point(s) of intersection between the parabola and the line.

=== End ====