

Name _____

Math 8A: Mrs. Roubos

Date _____

Period _____

Take Home Quiz #7
SHOW ALL ORGANIZED WORK

DUE: _____

<p>1) <u>Solve for x:</u> $\frac{x-5}{6} + \frac{1}{3} = \frac{3}{6}$</p> <p style="text-align: right; border: 1px solid black; width: 20px; margin-left: auto;">4</p>	<p>2) <u>Simplify:</u> $(4x^2 - 3x + 2) - (x^2 + 4x - 6)$</p> <p style="text-align: right; border: 1px solid black; width: 20px; margin-left: auto;">4</p>	
<p>3) <u>When your answer from #2</u> is multiplied by $\frac{1}{2}x^2$, what is the result written in standard form?</p> <p style="text-align: right; border: 1px solid black; width: 20px; margin-left: auto;">3</p>	<p>4) <u>Solve for x:</u> $245 + 0.06x = 425 + 0.045x$</p> <p style="text-align: right; border: 1px solid black; width: 20px; margin-left: auto;">4</p>	
<p>5 - 9: Simplify each radical. (Must be in its most simplest form.)</p>		
<p>5) $-3\sqrt{108}$</p> <p style="text-align: right; border: 1px solid black; width: 20px; margin-left: auto;">3</p>	<p>6) $\sqrt{150x^3y^6}$</p> <p style="text-align: right; border: 1px solid black; width: 20px; margin-left: auto;">4</p>	
<p>7) $\sqrt{6} \cdot \sqrt{3}$</p> <p style="text-align: right; border: 1px solid black; width: 20px; margin-left: auto;">3</p>	<p>8) $\frac{3}{2\sqrt{6}}$</p> <p style="text-align: right; border: 1px solid black; width: 20px; margin-left: auto;">4</p>	<p>9) $4x\sqrt{2} + 7x\sqrt{2}$</p> <p style="text-align: right; border: 1px solid black; width: 20px; margin-left: auto;">6</p>

10) Solve for c in terms of x & y: $x = yc^2$

3

11) What is the factored form of: $x^2 + 6x + 8$?

2

12) What is the factored form of: $x^2 - 7x + 12$?

2

13) Which number makes this equation true?
 $q^2 + 3q - 18 = (q + 6)(q - \underline{\quad})$

2

14) Solve for b $5(ab + 6) = 42.$

3

15) The area of a garden is given by the trinomial $g^2 - 2g - 24$. The garden's length is $g + 4$. What is the garden's width? Solve by factoring!

3

16) Solve the inequality below:

$$2(x + 4) < 3x - 5$$

4

17) Find the product of: $(x - 3)(x^2 - 2x + 6)$

4

18) Factor completely: $a^3 - 2a^2 - 15a$

3

19) Factor completely: $8x^3 - 32x$

3