

Chapter 10B Student Success Sheet (SSS)

Radical Expressions and Geometry

Olathe East High School – Intermediate Algebra

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Name: _____
Hour: _____

Need Help? Support is available!

- www.mhollan.weebly.com
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“There are no secrets to success. It is the result of preparation, hard work, and learning from failure.”

Colin Powell

Concept #	What we will be learning...	# of videos
7	Solving radical equations (radical on one side only); check for extraneous solutions	
8	Solving radical equations (radicals on both sides); check for extraneous solutions	
9	Midpoint Formula	
10	Distance Formula	

CONCEPT 7 – Solving Radical Equations (radical on one side only)
check for extraneous solutions

How do you get rid of a radical? _____

What does it mean to “check for extraneous solutions”?

61) $\sqrt{x + 5} = 2$

62) $\sqrt{2k + 18} = 2$

63) $10 = \sqrt{1 - 99p}$

64) $\sqrt{\frac{n}{4}} = 1$

65) $\sqrt{-9 - 9m} = 9$

66) $0 = \sqrt{-10 - x}$

CONCEPT 8 – Solving Radical Equations (radicals on both sides)
check for extraneous solutions

67) $\sqrt{19 - 2v} = \sqrt{3v - 21}$

68) $\sqrt{3n - 2} = \sqrt{2n}$

69) $\sqrt{6k} = \sqrt{5k + 1}$

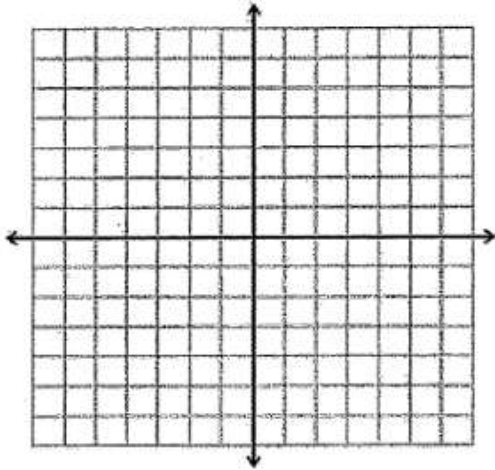
70) $\sqrt{\frac{a}{7}} = \sqrt{90 - 2a}$

71) $\sqrt{13 - n} = \sqrt{n + 3}$

CONCEPT 9 – Midpoint Formula

Given two ordered pairs: (x_1, y_1) and (x_2, y_2) The midpoint is: $\left(\frac{x_1+x_2}{2}, \frac{y_1+y_2}{2} \right)$

Plot the points $(6, 3)$ and $(-4, -1)$ on the coordinate plane below.



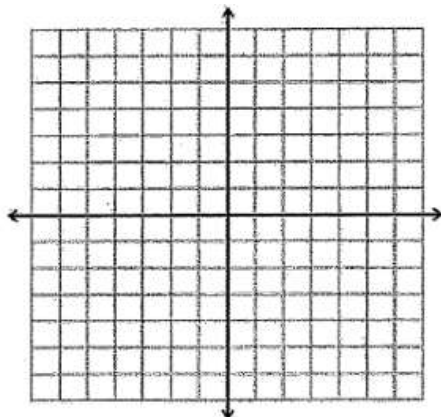
72) $(3, 9)$ $(8, 0)$	$\left(\frac{+}{2}, \frac{+}{2} \right)$	73) $(6, -2)$ $(-7, 10)$	$\left(\frac{+}{2}, \frac{+}{2} \right)$
74) $(9, -6)$ $(7, 0)$		75) $(-8, -9)$ $(-8, 10)$	

CONCEPT 10 – Distance Formula

Given two ordered pairs: (x_1, y_1) and (x_2, y_2)

The distance between the two points is: $\sqrt{(x_1 - x_2)^2 + (y_1 - y_2)^2}$

Plot the points $(6, 3)$ and $(-4, -1)$ on the coordinate plane below.



<p>76)</p> <p>$(-6, 6)$ $(5, -4)$</p>	$d = \sqrt{(\quad - \quad)^2 + (\quad - \quad)^2}$
<p>77)</p> <p>$(7, 1)$ $(7, 5)$</p>	$d = \sqrt{(\quad - \quad)^2 + (\quad - \quad)^2}$
<p>78)</p> <p>$(0, 6)$ $(7, -5)$</p>	$d = \sqrt{(\quad - \quad)^2 + (\quad - \quad)^2}$
<p>79)</p>	$d = \sqrt{(\quad - \quad)^2 + (\quad - \quad)^2}$