Algebra 1 Unit 10: Exponential Functions Practice

Day 6: Growth/Decay Percents of Change
Practice Assignment

Name: Key **Block:** _____

Identify the following:

Equation	Growth/Decay	Starting Value	Growth/Decay Factor	Percent of Change
$Y = 350(1 + 0.75)^t$	Growth	350	1.75 (175%)	$100 + ? = 175$ 75%
$Y = 240(0.75)^t$	Decay	240	0.75 (75%)	$100 - ? = 75$ 25%
$Y = 8(1 - 0.15)^t$	Decay	8	.85 (85%)	$100 - ? = 85$ 15%
$Y = 6.72(2)^t$	Growth	6.72	2 (200%)	$100 + ? = 200$ 100%
$Y = 25(1.2)^t$	Growth	25	1.2 (120%)	$100 + ? = 120$ 20%
$Y = 1250(0.865)^t$	Decay	1250	0.865 (86.5%)	$100 - ? = 86.5$ 13.5%
$Y = 4(0.8)^t$	Decay	4	0.8 (80%)	$100 - ? = 80$ 20%
$Y = (1.8)^t$	Growth	1	1.8 (180%)	$100 + ? = 180$ 80%
$Y = 0.65(0.48)^t$	Decay	0.65	0.48 (48%)	$100 - ? = 48$ 52%
$Y = 175(1.028)^t$	Growth	175	1.028 (102.8%)	$100 + ? = 102.8$ 2.8%
$Y = 700(0.995)^t$	Decay	700	0.995 (99.5%)	$100 - ? = 99.5$ .5%
$Y = (\frac{7}{8})^t$	Decay	1	7/8 or .875 (87.5%)	$100 - ? = 87.5$ 12.5%