

Exit tickets Week of 3.13

Monday:

28.) The average life expectancy in the United States has been rising steadily in the past few decades due to advances in medical and technology fields. The table below represents a linear relationship.

Year	Life expectancy
1920	54.1
1930	59.7
1940	62.9
1950	68.2
1960	69.7
1970	70.8
1980	73.7
1990	75.4

- a.) What is the life expectancy in 2000?
- b.) In what year will the life expectancy be 84.6 years?

Tuesday:

29.) John invested some money into an account where the money will grow exponentially. The table below shows the amount of money in his account.

John's Age	\$ in Account
18	\$ 500
22	\$ 644
28	\$ 937
36	\$ 1,553
45	\$ 2,738

- a.) How old is John when the account has \$ 1,207 in it?
- b.) How much money will be in John's account when he is 60?

Wednesday:

Verne has 6 math books to arrange on a shelf. Jenny has 4 English books to arrange on a shelf. In how many more orders can Verne arrange his books than Jenny?

In how many ways can three singers be selected from five who came to an audition?

In how many distinct ways can the letters of the word HAWAIIAN be rearranged?

A person is selected at random. What is the probability that the person was not born on a Thursday?

Thursday:

$$21.) \quad y = -\frac{1}{2}|x-4|$$

Transformations:

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$$22.) \quad y = 2\left(\frac{1}{4}x\right)^3 + 3$$

Transformations:

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$$23.) \quad y = -e^{3x+6} - 4$$

Transformations:

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$$24.) \quad y = 4\sqrt{-\frac{1}{2}x+3} - 7$$

Transformations:

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