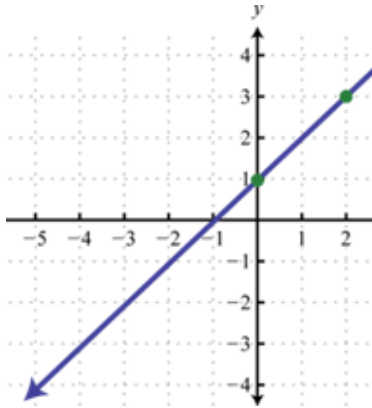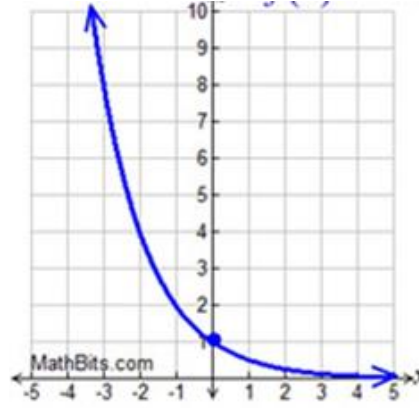State if the following graphs are increasing or decreasing. If they are both write the intervals with inequalities.
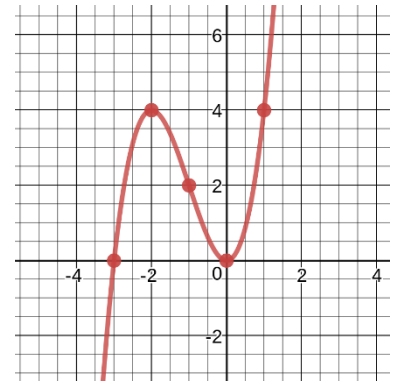
1.

2.

3.

4. Matt looked at the outside temperature every hour between 12pm and 7pm on Saturday. At 12, 1, 2, 3, 4, 5, 6, and 7 it was 56, 57, 58, 59, 61, 59, and 56, respectively. In **WORDS** describe when it was increasing and decreasing.
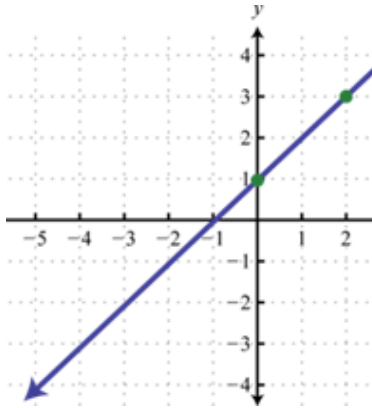
5. Lucky deposited $30 into a bank account and every week she added $25. In **WORDS** describe when it was increasing and decreasing.

Answers:

Increasing: $x < -2$ and $x > 0$ Decreasing: $-2 < x < 0$	Decreasing	Increasing
D: {0, 1, 2, 3, 4, 5} R: {20, 25, 35, 40, 50, 55} Discrete Decreasing: Never Increasing: Always X-int: None Y-int: (20,0)	D: $x \geq 0$ R: $y \geq 0$ Continuous Decreasing: Never Increasing: Always X-int: (0,0) Y-int: (0,0)	D: All reals R: $y \leq 2$ Continuous Decreasing: $x > 0$ Increasing: $x < 0$ X-int: (-1,0) and (1,0) Y-int: (0,2)

State if the following graphs are increasing or decreasing. If they are both write the intervals with inequalities.
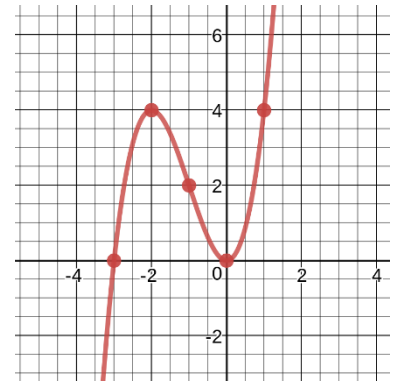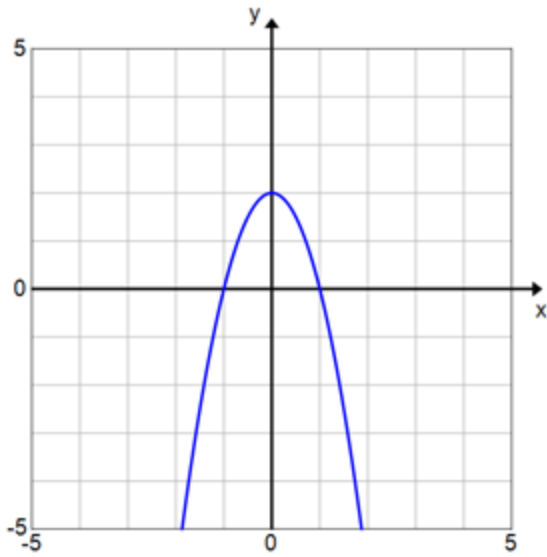
1.

2.

3.

4. Matt looked at the outside temperature every hour between 12pm and 7pm on Saturday. At 12, 1, 2, 3, 4, 5, 6, and 7 it was 56, 57, 58, 59, 61, 59, and 56, respectively. In **WORDS** describe when it was increasing and decreasing.

5. Lucky deposited $30 into a bank account and every week she added $25. In **WORDS** describe when it was increasing and decreasing.

Answers:

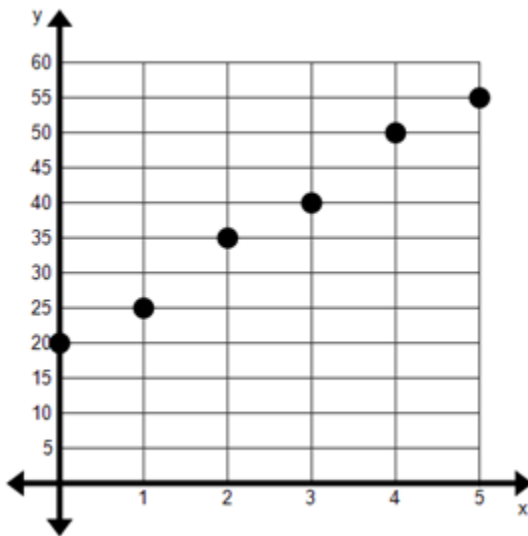| Increasing: $x < -2$ and $x > 0$ Decreasing: $-2 < x < 0$	Decreasing	Increasing
D: {0, 1, 2, 3, 4, 5} R: {20, 25, 35, 40, 50, 55} Discrete Decreasing: Never Increasing: Always X-int: None Y-int: (20,0)	D: $x \geq 0$ R: $y \geq 0$ Continuous Decreasing: Never Increasing: Always X-int: (0,0) Y-int: (0,0)	D: All reals R: $y \leq 2$ Continuous Decreasing: $x > 0$ Increasing: $x < 0$ X-int: (-1,0) and (1,0) Y-int: (0,2)

6.

Domain:_____

Range:_____

Discrete or Continuous

Decreasing? _____

Increasing?_____

X-intercept:_____

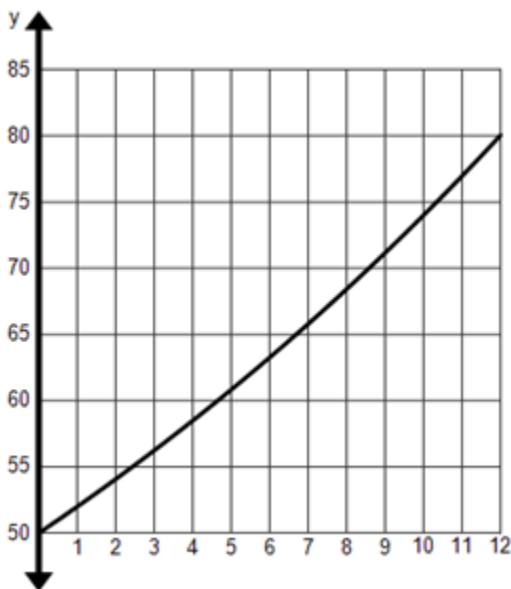Y-intercept:_____

7.

Domain:_____

Range:_____

Discrete or Continuous

Decreasing? _____

Increasing?_____

X-intercept:_____

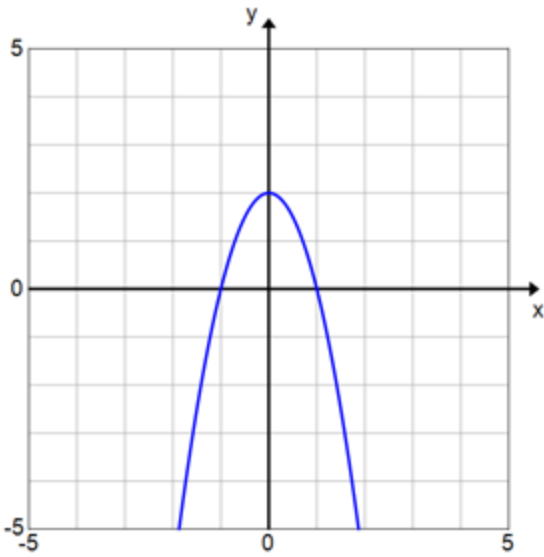Y-intercept:_____

8.

Domain:_____

Range:_____

Discrete or Continuous

Decreasing? _____

Increasing?_____

X-intercept:_____

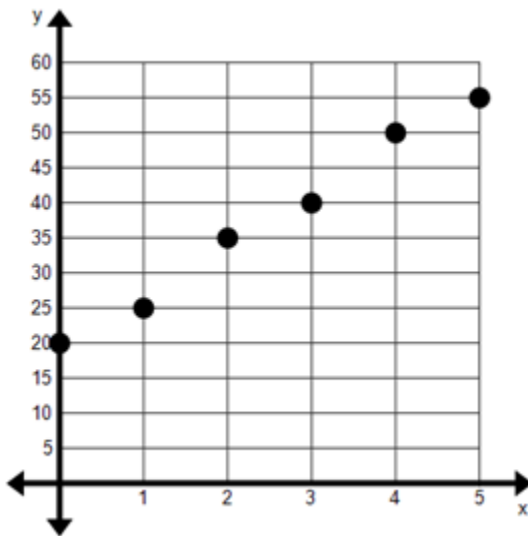Y-intercept:_____

6.

Domain:_____

Range:_____

Discrete or Continuous

Decreasing? _____

Increasing?_____

X-intercept:_____

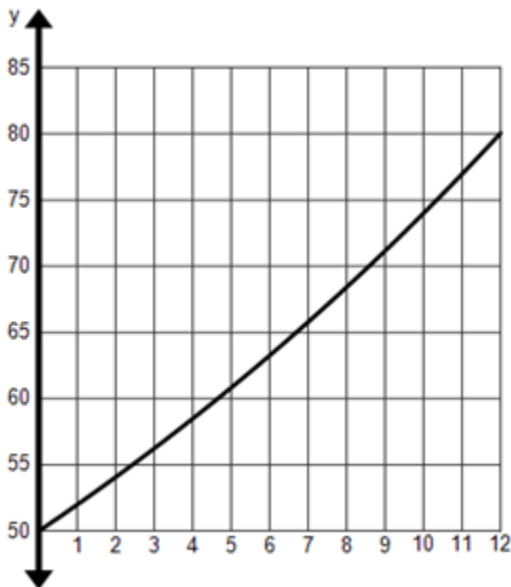Y-intercept:_____

7.

Domain:_____

Range:_____

Discrete or Continuous

Decreasing? _____

Increasing?_____

X-intercept:_____

Y-intercept:_____

8.

Domain:_____

Range:_____

Discrete or Continuous

Decreasing? _____

Increasing?_____

X-intercept:_____

Y-intercept:_____