Name:
Rate of Change Homework

Date: $\qquad$
Period: $\qquad$

Determine whether each rate of change is constant. If it is, find the rate of change and explain what it represents.
1.
Hodkey Ieam's offense

| Games | Goals |
| :---: | :---: |
| 1 | 2 |
| 2 | 4 |
| 3 | 6 |

2. 


3
Cars Washed

| Hours | Cars |
| :---: | :---: |
| 1 | 4 |
| 2 | 8 |
| 3 | 12 |
| 4 | 16 |

4. Writing: Explain why the significance about rate of change when slope of a horizontal line is always zero.

Find the rate of change for each situation.
5. The cost of tickets to the amusement park is $\$ 19.50$ for 1 ticket and $\$ 78$ for 4 tickets.
6. The late fee is $\$ 2$ regardless of the number of days the movie is late.
7. On the trip, Jerry had his cruise control set at $60 \mathrm{mi} / \mathrm{h}$ for 4 hours.
8. The contract states that every day past the agreed upon completion date the project is not finished, the price is reduced by $\$ 25$.
9. Growing from 1.4 m to 1.6 m in one year
10. Bicycling 3 mi in 15 min and 7 mi in 55 min
12. Reading 8 pages in 9 min and 22 pages in 30 min
13. The cost of four movie tickets is $\$ 30$ and the cost of seven tickets is $\$ 52.50$.
14. Five seconds after jumping out of the plane, a sky diver is $10,000 \mathrm{ft}$ above the ground. After 30 seconds, the sky diver is 3750 ft above the ground.
***Find 2 videos about rate of change and record the links here:

