$\qquad$

Solve for the specific variable.

1. $T=2 j k+2 k l+2 j l ;$ solve for $j$.
2. $F=m a$; solve for $m$.
3. $S=4 \pi r^{2}$; Solve for $r$.
4. $a c=b+c$; solve for $b$.

Find the average rate of change.
5. Interval $[2,5]$

7. $f(x)=-3 x^{2}-5 x+3$ on $[-1,6]$
9. $f(x)=-2 x^{2}-4$ on $[-3,-1]$
6. Nelson took a summer job, for five weeks, where he received a weekly salary plus tips. His take-home pay is recorded in the table. What was the average rate of change in his weekly take-home pay over the five weeks of his job?

| Week | Weekly <br> Salary |
| :---: | :---: |
| 1 | $\$ 60$ |
| 2 | $\$ 65$ |
| 3 | $\$ 72$ |
| 4 | $\$ 75$ |
| 5 | $\$ 80$ |

8. Find the average rate of change on the intervals [2, 3]

| $x$ | $f(x)$ |
| :---: | :---: |
| 1 | 21 |
| 2 | 18 |
| 3 | 16 |
| 4 | 10 |
| 5 | 8 |

